

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

QUANTUM BIOPHARMA LTD.,

Plaintiff,

- against-

CIBC WORLD MARKETS, INC., RBC DOMINION
SECURITIES INC., and JOHN DOES 1 THROUGH 10,

Defendants.

Civil Action: 1:24-CV-07972

AMENDED COMPLAINT

**JURY TRIAL
DEMAND**

Plaintiff Quantum BioPharma Ltd. (f/k/a FSD Pharma, Inc.) (“Quantum” or “Plaintiff”), as and for its complaint against CIBC World Markets, Inc. (“CIBC”), RBC Dominion Securities Inc. (“RBC”), and John Does 1 through 10 (collectively, “John Does,” and together with CIBC and RBC, “Defendants”), alleges upon personal knowledge, information and belief, and an investigation by counsel, as follows:

I. INTRODUCTION

1. The case arises from Defendants’ use of “spoofing,” an unlawful trading practice, to manipulate the market price of Quantum’s shares between January 1, 2020, and August 15, 2024 (the “Relevant Period”).¹ As explained below, Defendants’ trading practices have caused Quantum to suffer significant damages, and it seeks to recover more than \$700 million here.

2. The U.S. Securities and Exchange Commission (“SEC”) describes spoofing as “the submission and cancellation of buy and sell orders without the intention to trade in order to manipulate other traders.” In analyzing the impact spoofing can have on the market, the SEC has called spoofing a “harmful strategy” employed by high-frequency traders and carried out by “strategically placing orders to create the impression of substantial order book imbalances in order to manipulate subsequent prices.”

3. During the Relevant Period, Defendants placed thousands of spoofing orders to sell, to create the illusion that the share price of Quantum was declining. These orders were intended to—and did in fact—“trick” or “bait” other investors into selling their shares at lower prices, which further drove Quantum’s share price downward. Having caused the price of Quantum’s shares to decrease, Defendants then swooped in and purchased shares at artificially depressed prices, and thus positioned themselves to profit as long as they were either “short”

¹ Until August 15, 2024, the stock/ticker symbol for Quantum was “HUGE.”

Quantum's stock or "long" Quantum's stock and the market price of Quantum's shares rebounded to some extent.

4. While Defendants profited from these deceptive practices, many other market participants were harmed, including retail investors and Quantum itself.

5. Indeed, during the Relevant Period, Quantum relied on the reasonable assumption that United States and Canadian stock exchanges were efficient markets free from manipulation and sold approximately 90 million shares of its stock on those exchanges. That assumption, however, was incorrect. Instead, as a result of Defendants' pervasive spoofing, the price that Quantum received for that stock was artificially depressed. Absent Defendants' spoofing, Quantum would have been able to sell its shares at significantly higher prices.

6. This lawsuit seeks to hold each Defendant primarily liable for damages arising from either engaging in spoofing for their own proprietary accounts and/or for failing to fulfill their gatekeeping responsibilities by not designing, monitoring, and/or enforcing a system of risk management and supervisory controls, policies, and procedures that ensured their customers and traders did not manipulate the market, and complied with all applicable rules, regulations and laws, including Section 9(a), Section 10(b) and Rule 10(b)(5)(a) and (c) of the Securities Exchange Act of 1934 and the common law.

II. THE PARTIES

A. Plaintiff Quantum

7. Quantum is a Canadian biotechnology company, with its principal place of business in Toronto, Ontario, and a registered office in Wilmington, Delaware. The Company's securities are currently listed on Nasdaq, and have been traded on Nasdaq, which is located in, and conducts business operations in, New York City.

B. Defendant CIBC

8. CIBC is a Canadian corporation based in Toronto, Ontario. It is a registered broker-dealer that primarily executes securities transactions for its customers in Canada, including on the CSE, and routes to intermediary broker-dealers in the United States orders to be executed for its customers. Although CIBC cannot directly execute an order on a United States exchange (because it is not a member of any such exchange), it can and does clear and settle trades for its customers that are executed by intermediary broker-dealers on United States exchanges.

9. CIBC has conducted continuous activity in New York, directly related to these claims, by employing high-speed algorithmic computer systems to disseminate and/or effect orders and execute trades of Quantum shares throughout the United States, including in New York, on stock exchanges in the United States through intermediary U.S. broker-dealers.

C. Defendant RBC

10. RBC is a Canadian corporation based in Montreal, Quebec, and Toronto, Ontario. It is a registered broker-dealer that primarily executes securities transactions for its customers in Canada, including on the CSE, and routes to intermediary broker-dealers in the United States orders to be executed for its customers. RBC clears and settles trades for its customers that are executed by intermediary broker-dealers on United States exchanges.

11. RBC has conducted continuous activity in New York, directly related to these claims, by employing high-speed algorithmic computer systems to disseminate and/or effect orders and execute trades of Quantum shares throughout the United States, including in New York, on stock exchanges in the United States through intermediary U.S. broker-dealers.

D. Defendants John Does

12. John Does 1 through 10 are entities—including but not limited to market makers, broker-dealers, subsidiaries, affiliates, and sister companies of the Defendants, and Defendants' customers—whose identities are currently unknown, that unlawfully participated in the scheme to manipulate the trading and market price of Quantum securities through spoofing during the Relevant Period.

13. John Does 1 through 10 conducted continuous activity in New York County, directly related to these claims, by employing high speed algorithmic computer systems to route orders and execute trades of Quantum shares on exchanges located in New York County.

III. JURISDICTION AND VENUE

14. This Court has jurisdiction over the subject matter of this action pursuant to Section 27 of the Exchange Act [15 U.S.C. §78aa]; and Title 28 of the United States Code [28 U.S.C. § 1331]. Indeed, as explained below, Defendants engaged in manipulative trading practices, with the intent to manipulate the price of Quantum, on both the United States and Canadian markets, including Nasdaq and the Canadian Stock Exchange (“CSE”).

15. This court has personal jurisdiction over Defendants, who each conducted a substantial part of the events asserted in this Complaint in this District, and/or directed their fraudulent activity into the market by manipulating Quantum stock on Nasdaq, which is located in this District. The unlawful acts committed by each Defendant have had a direct and substantial impact on the market price of Quantum shares traded in this District.

16. Specifically, Defendants engaged in cross-border spoofing schemes that were intended to manipulate, and did in fact manipulate, the price of Quantum stock in the United States and Canada. This activity was intended to, and did in fact, send false and misleading

pricing signals to the market in order to trick or bait market participants and had a significant immediate impact on the price of Quantum's shares simultaneously in the United States and Canadian markets. Further, because Quantum is an interlisted security (as explained in greater detail below), manipulation of the market price in one market directly and immediately affects the trading price in the other country's market. In short, the purpose and effect of Defendants' conduct was to manipulate the price of Quantum on both Canadian and American stock exchanges, so that Defendants could profit.

17. Venue is proper in the Southern District of New York pursuant to 28 U.S.C. § 1391 and Section 27 of the Exchange Act, in that many of the acts, transactions and occurrences alleged herein occurred in this District, and Defendants conducted business here in connection with the events described herein. Defendants directly or indirectly made use of the means or instrumentalities of interstate commerce including the mails in connection with the conduct alleged herein.

IV. BACKGROUND

A. Quantum is an Interlisted Security

18. Since 2020, Quantum has been an interlisted security with its shares listed and traded on, among other exchanges, both Nasdaq and the CSE.

19. The trading of interlisted securities such as Quantum is facilitated by means of a security identifier known as a CUSIP. Quantum's CUSIP was 35954B404. Trades on both US and Canadian exchanges are electronically executed and settled through the CUSIP number of the security.

20. A share of Quantum stock that is traded in the United States is exactly the same share that is traded in Canada. Because shares of interlisted securities, like Quantum, have

identical CUSIP numbers and are fungible in Canada and the United States, they are netted out in the cross-border clearing and settlement process.

21. Purchasers and sellers of interlisted securities—unless specifically requested—have no control over where their broker-dealer disseminates, effects, routes or executes their orders. As a result of the seamless interconnection between the Canadian and U.S. markets for interlisted securities, and as a result of arbitrage trading, trades in either country’s markets directly and immediately affect the trading price in the other country’s market.

B. Defendants’ “Direct Market Access” Trading

22. Customers who are not members of an exchange are prohibited from placing orders directly onto that exchange in their own name. Defendants, acting in their capacity as brokers, place orders and execute trades on their customers’ behalf—by directly placing their customers’ orders on exchanges pursuant to their customer’s instructions with either (i) Direct Market Access (“DMA”) under SEC Rule 15c3-5,² the Market Access Rule (for U.S. trades), or (ii) Direct Electronic Access (“DEA”) under Universal Market Integrity Rule (“UMIR”) Direct Electronic Access and Routing Arrangements Rule 7.13 (for Canadian trades). Through these channels, Defendants’ customers can enter orders and/or trades, which Defendants then effectuate and disseminate.

² Rule 15c3-5 recognizes two types of market access arrangements whereby a broker-dealer allows one of its customers to use its marketplace participant identifier (“MPID”) to electronically access and enter orders into a market. In a “direct market access” arrangement, the customer’s orders flow through the broker-dealer’s trading systems, such that the pre- and post-trade processes are administered and controlled solely by the broker-dealer whose MPID is used. In a “sponsored access” arrangement, the customer routes the orders directly to the market, wholly bypassing the sponsoring broker-dealer’s systems. Under either type of market access arrangement, the broker-dealers continue to have “gatekeeper” responsibilities. The same is true with respect to Canadian broker-dealers.

23. As a matter of general business practice, Defendants provide their customers with access to the exchanges through DMA and DEA systems. Defendants are paid transaction fees for completed customer trades. When Defendants' customers use the DMA or DEA system, they do not place orders on exchanges under their own names; rather, these orders appear to the world as coming from Defendants because they bear Defendants' broker-dealer MPIDs.

24. Defendants may also engage in principal trading of securities, such as Quantum, for their own proprietary purposes.

C. **Defendants' "Gatekeeper" Obligations**

25. Broker-dealers in both Canada and the United States are considered by regulatory agencies to be "gatekeepers" of the integrity of trading on the securities exchanges and the stability of the financial system.

26. When broker-dealers such as Defendants either provide DMA or DEA systems access to customers, it is the broker-dealers' continuing responsibility to ensure that the customers' order flow—which the broker-dealers are disseminating and/or effecting—complies with all applicable rules, regulations, and laws.

27. Under the SEC Market Access Rule 15c3-5 and the IIROC UMIR 7.13, broker-dealers are required to establish, document, and maintain a system of risk management controls and supervisory procedures that are reasonably designed to manage the financial, regulatory, and other risks of the brokerage industry, and to prevent the disruption of a fair and orderly market.

28. Under FINRA Rule 3110, brokerage firms are also required to "establish and maintain a system to supervise the activity of each associated person (i.e., customer or internal trading desk) that are reasonably designed to achieve compliance with applicable securities laws and regulations[.]"

29. In Canada, while there is no national securities regulator comparable to the SEC, all exchanges and Alternative Trading Systems (“ATSSs”) must be members of IIROC and adhere to UMIR.³ These rules mirror the SEC and FINRA rules that require that a broker-dealer implement and maintain written policies and procedures to be followed by their officers, employees, and customers.

30. Specifically, UMIR 7.1 requires broker-dealers such as Defendants to supervise all of their customers’ trading activity through automated order systems like the DMA or DEA systems. Broker-dealers who provide market access to their customers to use their facilities and systems are held to the highest level of oversight and control and will be sanctioned by IIROC and FINRA for failing to supervise the trading activities of their customers. *See Reasons for Decision on Acceptance of Settlement, Matter of The Rule of Investment Industry Regulatory Organization of Canada and CIBC World Markets Inc.*, 2022 IIROC 05 (Apr. 8, 2022).

31. Registered-broker dealers like Defendants are also required pursuant to FINRA Rule 5210, Supplementary Material .01 and NASDAQ Exchange Rule 575, Disruptive Practices Prohibited, to detect and prevent manipulative or fraudulent trading that originated from algorithmic high-speed trading under the supervision and control of their firm. In addition, pursuant to FINRA rules, broker-dealers must also file an “Annual Certification of Compliance and Supervisory Processes,” in which they confirm that they have (1) established, maintained, and reviewed policies and procedures reasonably designed to achieve compliance with applicable FINRA rules, Municipal Securities Rulemaking Board (“MSRB”) rules and federal securities laws and regulations; (2) modified such policies and procedures as business, regulatory and legislative changes and events dictate; and (3) tested the effectiveness of such policies and

³ IIROC is now known as CIRO.

procedures on a periodic basis, the timing and extent of which is reasonably designed to ensure continuing compliance with FINRA rules, MSRB rules and federal securities laws and regulations.

32. Defendants acknowledged and accepted their role as “gatekeepers” who are legally obligated to monitor their customers’ order flow and prevent—rather than give effect to—any unlawful trading practices, such as spoofing, that their customers attempt to carry out under the shield of Defendants’ MPIDs. In fact, on information and belief, each Defendant has compliance procedures in which they explicitly confirm and commit to honor their monitoring obligations. Defendants, in short, knew what their “gatekeeping” responsibilities were but, as explained below, nevertheless disregarded those responsibilities.

D. The Mechanics of a Spoofing Scheme

33. In an efficient stock market that is free from manipulation, the price of a security is determined by the natural forces of supply and demand: the greater the demand or lower the supply, the higher the price; and the lower the demand or greater the supply, the lower the price.

34. The objective of a spoofing scheme is to distort publicly available information concerning the actual supply and demand of a security by injecting false and misleading information about supply and demand into the marketplace.

35. Specifically, a spoofe creates a false impression of excess supply or demand by placing “Baiting Orders” into the Limit Market Order Book.⁴ These Baiting Orders are not intended to be executed and have no legitimate economic purpose. Instead, the Baiting Orders

⁴ A “Limit Order Book” is an electronic list of buy and sell orders for specific securities and other financial instruments that is organized by price levels and lists the number of shares being bid or offered at each price point. The Limit Order Book reflects whether the market price for the security is moving upwards or downwards and is visible to every trader on the exchange.

are placed solely to create the illusion of market interest, which is intended to generate a response from other market participants to follow the artificial selling or buying trend that the Baiting Orders are intended to create. Thereafter, the spoofing party will cancel the Baiting Orders and take advantage of the price change caused by those Baiting Orders, by either buying shares at an artificially-deflated price or selling shares at an artificially-inflated price. The spoofing party may profit when the market share price partially reverts to pre-spoofing levels and he or she unwinds his or her position.⁵

36. Spoofing can be used to artificially inflate or lower the price of a security. If the spoofer's goal is to drive the price down, the spoofer enters Baiting Orders to sell, which are intended to "bait" or "trick" investors into entering their own sell orders to minimize or avoid suffering losses in a downward trending market. Shortly after the spoofer places the Baiting Orders to sell—and after those Baiting Orders have lured unsuspecting market participants into placing their own sell orders—the spoofer places orders to buy, or "Executing Purchase Orders," on the opposite side of the order book. These Executing Purchase Orders to buy are intended to be executed at the artificially low prices generated by the Baiting Orders to sell. Immediately after executing the Executing Purchase Orders to buy in the Market Order Book, the spoofer cancels the Baiting Orders to sell, completing the spoofing cycle.

37. One of the signs of manipulative spoofing is a rapid reversal of trading direction—for example, where a market participant places many sell orders, followed by a buy order, followed by the cancellation of the sell orders. This type of behavior strongly indicates

⁵ Spoofers often use high-frequency trading computer systems that operate algorithmic trading programs to maximize the speed of their market access and the execution of their trading strategies.

that the original sell orders were not intended to be executed, and instead, were merely a ploy to drive the share price downwards to enable the spoofe to “buy low.”

38. If the spoofe’s goal is to drive the price up, the spoofe will submit Baiting Orders to buy, which are intended to “trick” or “bait” investors into placing their own orders to buy. The spoofe will then place orders to sell to take advantage of an artificially manipulated upward market and will proceed to cancel his or her Baiting Orders to buy, thus completing the spoofing cycle.

39. A spoofing scheme, to drive the price either upward or downward, is frequently used multiple times during a trading day and repeated throughout a protracted trading period. While each spoofing event may have a limited impact on the market, the cumulative effect of spoofing that occurs over a prolonged period can have a persistent and significant impact.

V. DEFENDANTS’ UNLAWFUL SPOOFING SCHEMES

A. Quantum Succeeded During the Relevant Period

40. Founded in 1994, Quantum is a biopharmaceutical company dedicated to building a portfolio of innovative assets and biotech solutions for the treatment of challenging neurodegenerative and metabolic disorders and alcohol misuse disorders. Its current projects include developing Lucid-MS, a unique molecular compound drug candidate for treating neurodegenerative disorders, and “Unbuzzd,” a nonprescription formulation to rapidly relieve the negative effects of alcohol consumption.

41. Quantum has been publicly traded since May 2018. During the Relevant Period, its shares were listed on both Nasdaq and the CSE and traded on US and Canadian stock exchanges.

42. Over that period, Quantum's financial performance has generally improved. For example, although Quantum lost approximately \$39 million in 2019, its losses decreased in almost every subsequent year and, by 2023, were less than half of what they were in 2019.

43. Consistent with that trend, news for Quantum investors was generally positive during the Relevant Period.

44. For example, on June 3, 2020, the Company announced that the FDA had granted it permission to submit an Investigational New Drug Application for the use of FSD-201 to treat COVID-19. On June 22, 2020, the Company announced favorable Phase 1 results for that drug; on August 31, 2020, the Company announced that it had submitted its Investigational New Drug Application for FSD-201 to the FDA; and on September 28, 2020, the Company announced that the FDA had authorized Phase 2 clinical trials for FSD-201. Yet the price of Quantum fell from \$7.39 to \$2.76 over this period.

45. Similarly, on March 16, 2021, the Company announced that it had entered into a license agreement to develop certain veterinary drugs, and on May 10, 2021, the Company announced that it had submitted to the FDA an Investigational New Animal Drug Application regarding those drugs. Yet, again, the price of Quantum shares fell from \$2.07 to \$1.58 over this period.

46. As another example, on August 25, 2021, the Company announced that it had entered into an agreement to acquire Lucid Psycheceuticals Inc. ("Lucid"), a Canadian-based psychedelic pharmaceutical company focused on the development of therapies to treat critical neurodegenerative diseases. The transaction closed on September 21, 2021, and the Company announced positive news regarding Lucid's projects on October 19, 2021 (development contract), January 5, 2022 (pre-clinical data), July 13, 2022 (patent application), January 17,

2023 (submitted application for Phase 1 clinical trial), February 7, 2023 (received regulatory clearance to move forward with clinical trial in Canada), and March 22, 2023 (received regulatory clearance to move forward with clinical trials in Australia). Nevertheless, Quantum's shares fell from \$1.84 to \$1.56 during this period.

47. A similar pattern occurred with respect to news about another of Quantum's projects, Unbuzzd. For example, on February 14, 2023, the Company announced a new research and development program focused on unmet medical needs in the alcohol misuse space. The Company subsequently announced, on June 20, 2023, an exclusive license agreement with Celly Nutrition Inc. ("Celly") for recreational applications of Quantum's alcohol misuse technology, and then announced the launch of Unbuzzd on August 25, 2023. The price of Quantum shares fell from \$1.74 to \$1.25 during this period.

48. These price decreases were not explained by unfavorable news, industry trends, or macroeconomic trends. Indeed, notwithstanding the fact that markets received plenty of good news about Quantum's prospects during the Relevant Period, the price of Quantum's shares were significantly outperformed by the Nasdaq Index and the Nasdaq Small Cap Biotech Index.

49. The reason for this, as shown below, is that Defendants have relentlessly manipulated the price of Quantum shares through spoofing.

B. Each Defendant Has Participated in Spoofing Schemes

50. It is difficult to identify manipulative schemes in listed securities like Quantum on the basis of publicly available data because (i) those who participate in market manipulation schemes often employ a variety of tactics to hide their unlawful conduct, and (ii) most order flow in listed securities is publicly available only in anonymized form.

51. However, detailed market by order data is available for Canadian markets. These data show, among other things, not only each order and trade, but also a unique identifier for the

broker through which that order or trade was made. Accordingly, with the assistance of an expert, Quantum was able to determine which identifiers were associated with problematic trading activity. That analysis demonstrated that CIBC, RBC, and John Doe 1 each engaged in widespread spoofing over the Relevant Period. Other Defendants—John Does 2 through 10—may have also participated.

52. Each Defendant's spoofing activity, as explained further below, included placing and canceling Baiting Orders on *both* US and Canadian exchanges (and thus driving down the price of Quantum shares on those exchanges) and submitting Executing Purchase Orders on *both* US and Canadian exchanges.

C. **The Nature, Effect and Mechanism of Defendants' Unlawful Schemes**

53. Defendants' spoofing was conducted by either their own traders through their proprietary or principal accounts or by their customers who used Defendants' DMA or DEA systems to place orders under Defendants' accounts. As "gatekeepers" of the integrity of the marketplace, Defendants were required to design, document, and implement a system of supervisory controls, policies and procedures that managed the risks and prevented fraudulent trading by their customers. Either way, Defendants are fully responsible for their traders' own conduct or for knowingly or recklessly ignoring that their customers were injecting false and misleading information into the marketplace in the form of Baiting Orders that had no legitimate financial purpose and were never intended to be executed.

54. During the Relevant Period, Defendants placed thousands of Baiting Orders on Canadian and United States stock exchanges that were intended to create the illusion that Quantum shares were declining in value based on the natural forces of supply and demand.

55. Defendants' spoofing schemes were accomplished through the following three steps:

- a) Following the instructions of either their customers or their own proprietary traders, Defendants flooded exchanges' Limit Order Books with large quantities of Baiting Orders to sell. The sole purpose for the placement of these Baiting Orders to sell was to deceive and mislead other market participants into believing that the market price of Quantum securities was moving downward based on the natural forces of supply and demand;
- b) Almost simultaneously, when the Baiting Orders were being placed in the Limit Order Books, Defendants also placed their Executing Purchase Orders on the opposite side of the Limit Order Books to purchase Quantum shares at the lower stock prices caused by their Baiting Orders to sell; and
- c) Immediately after the completion of their Executing Purchase Orders to buy Quantum shares at the lower prices, Defendants cancelled and removed all of their Baiting Orders to sell from the Limit Order Books.

56. The three stages of Defendants' spoofing scheme—which collectively make up a "Spoofing Episode" or "Spoofing Cycle"—were completed sometimes within seconds or milliseconds and were repeated multiple times a day and continuously throughout the Relevant Period.

57. The continuous placement and cancellation of thousands of Baiting Orders to sell by Defendants on Canadian and United States stock exchanges was not in furtherance of any legitimate purpose. Rather, this activity was intended to send a false and misleading pricing signal to the market in order to "trick" or "bait" market participants into executing their own sell orders. Defendants' activities thus operated as a fraud on the market and created a "pile-on" effect which drove down Quantum's share price even further, thereby enabling Defendants to

purchase Quantum's shares at artificially manipulated lower prices for either their customers' accounts or their own proprietary accounts—and resulted in Quantum selling or issuing its shares at artificially low prices.

D. The Specifics of Defendants' Unlawful Manipulation of Quantum

58. Based on the limited data available, during the Relevant Period, Defendants submitted fictitious Baiting Orders totaling at least 16,212,300 shares on Canadian stock exchanges—12,213,000 for CIBC, 267,800 for RBC, and 3,731,500 for John Doe 1. In addition, based on the even more limited data available for United States exchanges, and further limiting that data to one-hour windows before Quantum sold shares in the Relevant Period, Defendants submitted at least 298,886 Baiting Orders (including 188,120 by CIBC) on United States stock exchanges simultaneously with Baiting Orders that they submitted on Canadian stock exchanges.⁶

59. It bears emphasizing that these figures are especially conservative for United States exchanges because trading data is anonymized, which makes it particularly difficult to identify spoofing. Notwithstanding that limitation, Quantum was able to identify Defendants' trading on United States exchanges by matching anonymized trades placed on United States exchanges with Defendants' trades on Canadian exchanges, where data is not anonymized.

60. Specifically, Quantum infers that orders and trades placed on United States exchanges ten milliseconds or less before Defendants' orders and trades on Canadian exchanges were also placed by Defendants, on the grounds that (i) the trades were placed simultaneously or

⁶ Unless otherwise noted, the spoofing episodes on United States exchanges occurred ***within one hour before Quantum's share sales***. To be clear, Quantum identified many spoofing episodes from Defendants on United States exchanges that occurred outside of this time window as well.

near-simultaneously, and (ii) the likelihood of trades being placed by independent actors at such close temporal proximity is exceedingly low.

61. Courts have recently accepted similar “probabilistic imputation” methodologies to identify traders in anonymized data. *See, e.g., Mullen Auto., Inc. v. IMC Fin. Mkts.*, 2025 WL 951501, at *4 (S.D.N.Y. Mar. 28, 2025). Following the logic applied by the plaintiffs in *Mullen*, the likelihood that two order messages sent independently at the same second arrive during the same ten-millisecond period by random chance alone is 10 in 1,000,000 or 0.001%, while the probability that they arrive during the same *specified* ten-millisecond period by random chance alone is an order of magnitude lower. In addition, Quantum independently verified the reliability of this methodology by testing it on a sample of deanonymized Canadian trading data. Specifically, Quantum analyzed instances where trades were placed within ten milliseconds and found that such trades were typically placed through the same broker.

62. To be sure, there are reasons to believe that Defendants engaged in far more extensive spoofing on United States exchanges than Quantum has detected to date. First, analysis of Canadian trading data indicated that Defendants repeatedly engaged in spoofing on Canadian exchanges—far more than other market participants for which data is available. Second, analysis of extremely limited available United States trading data indicates that Defendants also engaged in spoofing on United States exchanges. Third, trading volume is far higher on US exchanges than on Canadian exchanges. Fourth, although United States trading data is anonymized, the available data suggests that market participants frequently spoofed Quantum’s stock during the Relevant Period. For example, a preliminary analysis of US trading data indicates that there were more than 700 spoofing *episodes* with respect to Quantum stock over the Relevant Period when the data is limited to trading within *five minutes* before Quantum’s share sales.

63. Defendants' Baiting Orders led to substantial sell-side imbalances in Defendants' order flow, which were intended to – and did – send false and misleading pricing signals to the marketplace that interfered with Quantum's share price being determined by the natural forces of supply and demand.

64. The Baiting Orders were disseminated and/or effected by Defendants on Canadian and United States stock exchanges, with knowledge that such orders were part of a spoofing scheme that was intended to manipulate the price of Quantum stock.

65. By design, Defendants' Baiting Orders led to a "pile-on" effect, where artificial selling pressure was created, which induced other market participants to submit additional sell orders and artificially drove down the price of Quantum shares. Specifically, over the course of each Spoofing Episode, the Baiting Orders successfully induced the entry of sell orders from other market participants, driving down the price of Quantum shares by an average of 90.52 basis points per episode (86.38 for CIBC, 78.85 for RBC, and 96.25 for John Doe 1) on Canadian exchanges and an average of 68 basis points per episode on United States exchanges.

66. Almost simultaneously, Defendants executed Executing Purchase Orders to purchase at these depressed prices a total of 357,997 shares on Canadian exchanges (240,710 for CIBC, 11,465 for RBC, and 105,822 for John Doe 1) and 3,371 shares on United States exchanges, which were below the prevailing best offer prior to Defendants placing the Baiting Orders. These US trades occurred within one hour before Quantum's share sales.

67. Shortly thereafter, Defendants cancelled all of the fictitious Baiting Orders.

68. As discussed in further detail below, Defendants' Baiting Orders were intended to function as part of a scheme to defraud the market in Quantum securities rather than be executed. This intent can be reasonably inferred from, *inter alia*: (1) the short time period between the

continuous and repeated placement and cancellation of the Baiting Orders; (2) the concentration of cancelled Baiting Orders during the limited period when each spoofing event occurred; (3) the average size of the Baiting Orders that were cancelled, in comparison to the average size of the bona-fide sell orders that were executed; (4) the ratio of cancelled Baiting Orders to sell compared to the executed bona-fide orders to buy that existed; and (5) the reoccurrence of the same trading patterns over an extended period of time.

69. For each named Defendant, the following table lists the share volume of Baiting Orders that were placed and subsequently canceled, share volume of Executing Purchase Orders which were executed at depressed prices, and the resulting price decline in Quantum shares.⁷

Defendant	No. of Episodes	Shares in Baiting Orders	Purchase Volume	Ratio of Baiting Orders to Purchase Volume	Average Price Decline
CIBC	747	12,213,000	240,710	50.74-to-1	86.38 basis points
RBC	38	267,800	11,465	23.36-to-1	78.85 basis points
JOHN DOE 1	618	3,731,500	105,822	35.26-to-1	96.25 basis points

70. To be clear, Defendants' manipulative conduct was not limited to their trading on the Canadian market. Instead, statistical analysis of United States trading data indicates that, at the same time that Defendants were engaged in spoofing on the Canadian market, similar manipulative trades were placed on United States markets. Although the United States trading data is anonymized, upon information and belief, Defendants and/or their clients were

⁷ The data contained in this table does not reflect all of the Spoofing Episodes that existed during the Relevant Period. Only after discovery is taken can a full and complete record of Defendants' proprietary trading and/or their customers trading be determined.

responsible for these trades on United States markets as part of a coordinated effort to suppress the price of Quantum stock.

71. This is confirmed by comparing trading patterns in the United States at times where Defendants were engaged in spoofing in the Canadian Market, with trading patterns in the United States at times where Defendants were not engaged in spoofing in the Canadian market.

72. For example, Net New Size measures the difference between the total size of buy orders and the total size of sell orders placed during a particular period, divided by the average order size for a given day. Negative values indicate that the total size of sell orders was greater than the total size of buy orders. While Defendants were engaged in spoofing in the Canadian market, Net New Size in the United States was -44.44; it was -0.48 when Defendants were not engaged in spoofing. This difference is statistically significant.

73. As another example, Pre-Trade Short Order Life Percent measures the percentage of new sell orders with order lifetimes in the bottom quartile. While Defendants were engaged in spoofing in the Canadian market, Pre-Trade Short Order Life Percent in the United States market was 47.52%; it was 27.70% in the United States market when Defendants were not engaged in spoofing. This difference is statistically significant.

74. As a third example, Post-Trade Net Cancellation Size measures the difference between the sizes of buy order cancellations and sell order cancellations, relative to the average order size for a given day. Negative values indicate that the total size of sell orders canceled was greater than the total size of buy orders canceled. While Defendants were engaged in spoofing in the Canadian market, the Post-Trade Net Cancel Size in the United States market was -36.74; it was 3.09 in the United States when Defendants were not engaged in spoofing. This difference is statistically significant.

75. Together, these data points show that (i) anomalously large new sell order volume was created in the United States market while Defendants were engaged in spoofing in the Canadian market, (ii) an abnormally large number of sell orders were cancelled relative to buy orders in the United States market while Defendants were engaged in spoofing in the Canadian market; and (iii) those orders were canceled unusually quickly.

76. That Defendants would simultaneously carry out their spoofing activities in the United States market comports with common sense. Indeed, the success of Defendants' spoofing activity in the Canadian market (which is less liquid, and therefore easier to manipulate) depended on Defendants also engaging in similar manipulative conduct in the United States market; absent such conduct in the United States, sellers would simply choose to sell at higher prices on the United States market as opposed to selling at artificially deflated prices on the Canadian market.

77. In addition, as noted above, analysis of trading data further demonstrates that Defendants engaged in spoofing on United States exchanges. Notwithstanding the fact that US trading data is extremely limited, Quantum has identified several instances where, when Defendants spoofed on Canadian stock exchanges in the hour preceding Quantum's own share sales, Defendants also (based on the methodology described in paragraphs 59 through 61) spoofed on United States exchanges. During those spoofing episodes on United States exchanges, Defendants placed a total of 298,866 Baiting Orders (leading to an average price decline of 68 basis points) and 3,371 Executing Orders.

E. Defendants Acted with Scienter

78. As set forth below, each Defendant knowingly or recklessly participated in spoofing schemes that were intended to—and in fact did—deceive, manipulate and/or defraud the market for Quantum shares and the participants in that market, including in US exchanges.

79. *First*, Defendants submitted Baiting Orders for a median of 5,100 sell-side shares per Executing Purchase that were subsequently canceled. By contrast, over those same periods, other market participants submitted orders on median for only 1,300 sell-side shares, which were subsequently canceled—a difference of 392%.

80. *Second*, compared to other market participants, Defendants purchased far more shares at depressed prices during the minutes following the spoofing window. Specifically, over the five minutes after the spoofing windows, Defendants purchased an average of 2,863 shares while other market participants purchased an average of 1,394 shares over those same windows.

81. *Third*, the size of the Baiting Orders that were cancelled—in comparison to the size of bona fide sell-side orders that were executed by Defendants—is also indicative of scienter. During each Spoofing Episode, Defendants placed and subsequently cancelled a median of 5,100 shares in Baiting Orders (5,900 for CIBC, 7,000 for RBC, and 4,300 for John Doe 1) while executing a median of 0 sell-side orders. The stark contrast between the share volume of Baiting Orders and executed sell-side orders during each Spoofing Episode indicates that Defendants were manipulating the market by using Baiting Orders as tools to generate artificial prices rather than making a genuine attempt to sell Quantum shares. Put differently, the ratio of canceled Baiting Orders compared to executed sell orders strongly indicates that Defendants never intended to execute their Baiting Offers. Similarly, on United States exchanges, during spoofing episodes, Defendants placed and subsequently canceled a median of 12,036 Baiting Orders, while the median NBBO size on United States exchanges those days was 1,600 shares.

82. *Fourth*, the size of executed sell-side orders compared to Executing Purchases by Defendants is also indicative of scienter. In the median Spoofing Episode, Defendants executed 100 shares each in Executing Purchases, while in contrast executing 0 sell-side orders. The stark

contrast between the share volume of Executing Purchases and sell-side orders further indicates that Defendants were manipulating the market by using Baiting Orders as tools to generate artificial prices at which to place Executing Purchases as favorable prices.

83. *Fifth*, when spoofing the market, Defendants injected significantly more artificial sell-side order flow than non-spoofed orders prior to buying shares, as measured by (1) the volume of sell side order flow and (2) the cancellation of that order flow. Specifically, among the spoofing episodes, during the Baiting Period preceding the execution of Executing Purchases, Defendants submitted new sell-side orders that were canceled for an average of 11,555 shares per Executing Purchase. During the same time window as the Baiting Period prior to non-spoofed purchases, they submitted new sell-side orders for an average of 828 shares per purchase. In addition, during the Cancellation Period following non-spoofed purchases, Defendants canceled an average of 1,296 sell-side orders. That is, on average, there were 13.96 times more sell-side shares created in the Baiting Period prior to Executing Purchases compared to non-spoofed purchases, and 8.9 times more sell-side shares canceled in the Cancellation Period following Executing Purchases compared to non-spoofed purchases. Similarly, on United States exchanges, an average of 12,036 sell-side shares were created during spoofing episodes, compared to 1,987 during non-spoofing episodes on those same days.

84. *Sixth*, Defendants' behavior was inconsistent with bona fide market-making. Over Cancellation Periods, Defendants cancelled 88% of the sell-side orders created during Baiting Periods, but only 69% of the buy-side orders created during Baiting Periods. The asymmetry in order cancellation rates is inconsistent with bona fide market-making, which involves purchases and sales in roughly comparable amounts to provide liquidity to customers or other broker-dealers.

85. *Seventh*, on information and belief, each Defendant (and/or their customers) specifically designed and implemented algorithmic trading programs that executed the spoofing schemes. Indeed, nearly 75% of all trades are conducted algorithmically, each Defendant is heavily engaged in algorithmic trading, and Defendants' spoofing trades were executed too quickly to have been manually executed. Consistent with these facts, Defendants placed and cancelled in rapid succession tens of millions of Baiting Orders to sell that were never intended to be executed. Moreover, on information and belief, Defendants—each of which is a sophisticated entity that uses cutting-edge technology—closely monitored, modeled, and analyzed the performance, impact, and effects of their algorithmic trading programs throughout the Relevant Period, including the spoofing pattern which the algorithm executed again and again on Quantum stock during the Relevant Period with similar effects each time.

86. *Eighth*, on information and belief, each Defendant's (and/or their customers') trading activities were approved by corporate officials sufficiently knowledgeable about the trading practices of each Defendant (and/or their customer) such that each Defendant (and/or their customer) knew or recklessly ignored that they were engaging in illegal spoofing.

87. *Ninth*, as registered broker-dealers, Defendants knew and/or were required to know that it was unlawful to place Baiting Orders to sell that were never intended to be executed in order to trick market participants into selling shares of Quantum stock.

88. *Tenth*, pursuant to applicable regulations and their own compliance manuals, Defendants were required to have internal policies, procedures, and systems that detected and prohibited manipulative or fraudulent trading devices or schemes. Given these obligations, Defendants either intentionally manipulated the market through their spoofing schemes or were reckless in allowing such behavior to occur.

89. *Eleventh*, the short time period between the placement and cancellation of their Baiting Orders is further indicative of scienter. During each Spoofing Episode, Defendants placed and then cancelled the Baiting Orders within seconds or even milliseconds. This practice, which occurred thousands of times over the Relevant Period, indicates that Defendants never intended to execute the Baiting Orders.

90. *Twelfth*, the concentration of Baiting Orders during the limited period when each spoofing event occurred is also indicative of scienter. During each Spoofing Episode, Defendants cancelled all of the Baiting Orders, sometimes amounting to tens of thousands of Baiting Orders, in a matter of seconds and sometimes milliseconds, all of which had been placed by Defendants mere seconds earlier.

91. *Thirteenth*, Defendants carried out thousands of Spoofing Episodes over the Relevant Period, and often multiple episodes per trading day. The repetition of this pattern of placing fictitious Baiting Orders which created an artificial price, Executing Purchases at the artificial price, and then cancelling all of the Baiting Orders, is indicative of scienter. An ordinary trader buys when it thinks the price of a security is likely to go higher and sells when it thinks the price of a security will go lower. In contrast, one of the tell-tale signs of manipulative spoofing is rapid, unnatural reversal of trading direction—a large volume of sell orders, followed by buy orders, followed by the cancellation of the original sell orders—which suggests that the original sell orders were merely a ploy to drive the price down to “buy low.” Statistically, Defendants exhibited this distinctive pattern again and again—and at multiples of the average trader, demonstrating that Defendants’ manipulative trading was intentional.

92. *Fourteenth*, confirming their manipulative intent and motive to engage in spoofing to suppress the price of Quantum shares, upon information and belief, Defendants

CIBC and RBC engaged in other potentially problematic trading practices with respect to Quantum shares during the Relevant Period, including naked short selling, which involved selling Quantum shares short without owning, borrowing, or securing the right to borrow those shares. This is evidenced by (i) the remarkably high ratio of trading volume in Quantum to the float of the stock,⁸ which is generally indicative of significant short selling;⁹ (ii) lending data, which, combined with short selling data, suggests that many short sales were “naked”;¹⁰ (iii) significant imbalances between Quantum shares reflected in broker position reports and shares held in United States and Canadian depositories, especially for Defendants, which further suggests that Defendants were involved in naked short selling;¹¹ and (iv) the surplus of net shares of Quantum sold by CIBC (as measured with CSE market data) over a given period above the decrease in CIBC’s inventory of Quantum’s shares over that same period (as measured by CDS data), which further supports the inference that CIBC was engaged in trading shares that it did not own.¹²

⁸ Specifically, 2.7x in Canada and 32.3x in the United States, over the period from January 2020 through July 2024.

⁹ Consistent with this inference, approximately 38.3% of trading volume in Quantum from January 2020 through October 14, 2024, was short—well above the marketwide average of about 25%.

¹⁰ Indeed, the maximum number of shares on-loan overnight from January 2020 to July 2024 was 1,494,650, while the maximum number shares short according to FINRA were 1,410,263.

¹¹ For example, these imbalances were, on average, 20.4% of the entire float during the period from September 20, 2021, to August 15, 2024.

¹² For example, between December 1, 2022, and February 28, 2023, CIBC sold a net of 1,407,012 shares of Quantum; over that same period, according to CDS data, CIBC’s inventory of Quantum’s shares decreased by 431,901 shares.

93. *Fifteenth*, in March 2023, almost immediately after Quantum's CEO expressed concerns to CIBC that he believed CIBC may be engaged in manipulative trading practices with respect to Quantum's stock, CIBC aggressively and repeatedly shorted Quantum's stock.

94. When these factors are collectively considered, strong circumstantial evidence exists that Defendants either knew or recklessly ignored that their own conduct and/or their customers' conduct was designed to and did unlawfully manipulate the market in violation of federal securities laws, industry regulations and their own compliance manuals.

95. Finally, Defendants had a strong motive to spoof shares of Quantum stock. By posting the fictitious Baiting Orders, Defendants were able to purchase hundreds of thousands of Quantum shares at depressed prices, instead of having to purchase shares of Quantum at the prevailing best offer.

F. Illustrative Examples of Defendants' Participation in Spoofing Episodes

96. This section provides illustrative examples of Defendants' manipulative spoofing activity identified over the Relevant Period. These examples are intended to be illustrative, not exhaustive. Indeed, Defendants engaged in hundreds of additional spoofing episodes.

1. Defendant CIBC

a) Example – June 3, 2020

97. On June 3, 2020, at 15:03:58.406, the best bid and offer for Quantum on the U.S. Markets was \$8.09 USD and \$8.10 USD, respectively. Between 15:03:58.997 and 15:04:03.934, Defendant CIBC and/or its clients submitted 37 Baiting Orders to sell on the Canadian market, totaling 11,800 shares, at prices ranging from \$11.27 CAD down to \$10.77 CAD.

98. Over this Baiting Period, CIBC and/or its clients placed mostly sell-side orders, resulting in significant sell-side imbalances in Canada. Similarly, in the US, there were 61,723

shares in the first twenty levels of the order book on the ask side, and 30,616 shares on the bid side, a significant sell-side imbalance of 2.01.

99. The Baiting Orders to sell placed by CIBC and/or its clients successfully induced the entry of sell orders from other market participants, driving the price of Quantum shares downward. As a result, between 15:04:03.925 and 15:04:05.602, CIBC and/or its clients executed seventeen Executing Orders on the Canadian market to buy a total of 1,700 shares at lower prices ranging from \$10.69 CAD to \$10.74 CAD as follows:

Time	Price (in CAD)	Shares	Buyer
2020-06-03 15:04:03.925	10.74	100	CIBC World Markets
2020-06-03 15:04:03.927	10.71	100	CIBC World Markets
2020-06-03 15:04:03.927	10.69	100	CIBC World Markets
2020-06-03 15:04:03.927	10.69	100	CIBC World Markets
2020-06-03 15:04:03.927	10.69	100	CIBC World Markets
2020-06-03 15:04:03.927	10.69	100	CIBC World Markets
2020-06-03 15:04:03.927	10.69	100	CIBC World Markets
2020-06-03 15:04:03.927	10.69	100	CIBC World Markets
2020-06-03 15:04:03.934	10.69	100	CIBC World Markets
2020-06-03 15:04:03.935	10.69	100	CIBC World Markets
2020-06-03 15:04:03.946	10.69	100	CIBC World Markets
2020-06-03 15:04:03.959	10.69	100	CIBC World Markets
2020-06-03 15:04:03.969	10.69	100	CIBC World Markets
2020-06-03 19:04:05.067	10.69	100	CIBC World Markets
2020-06-03 19:04:05.068	10.69	100	CIBC World Markets
2020-06-03 19:04:05.346	10.69	100	CIBC World Markets
2020-06-03 19:04:05.359	10.69	100	CIBC World Markets
2020-06-03 19:04:05.602	10.69	100	CIBC World Markets

100. Similarly, in the US, 3,529 shares traded at the bid, while only 964 shares traded at the ask during the pre-trade period, while the ask price in the US declined from \$8.10 USD to \$8.05 USD, a decline of 62 basis points. This trading imbalance continued as the Baiting Orders in Canada were canceled with 1,900 shares traded at the bid in the US versus only 100 at the ask.

101. Through the Executing Orders, CIBC and/or its clients were able to purchase shares at prices below the prevailing best offer in Canada of \$10.98 CAD, which was the natural price before CIBC and/or its clients entered the Baiting Orders. Without the Baiting Orders, CIBC and/or its clients would have been required to pay the prevailing best offer price (or

higher) to buy Quantum shares. Beginning at 15:03:59.005, as it was submitting and executing the Executing Orders, CIBC began cancelling all of its Baiting Orders to sell on the Canadian market. The last Baiting Order was canceled at 15:04:05.849.

102. These spoofing cycles continued throughout the course of the trading day, with 27 total events by CIBC on June 3, 2020, placing continuous downward pressure on Quantum's share price and thus causing a diminution of that price.

b) Example – November 30, 2020

103. On November 30, 2020, at 10:33:17.436, the best bid and offer for Quantum on the US markets were \$2.27 USD and \$2.30 USD, respectively. Between 10:33:17.817 and 10:33:22.436, Defendant CIBC and/or its clients submitted 139 Baiting Orders to sell on the Canadian market, totaling 71,500 shares, at prices ranging from \$3.10 CAD down to \$2.80 CAD.

104. Over this Baiting Period, CIBC and/or its clients placed more sell-side orders than buy-side orders, resulting in a significant sell-side imbalance in Canada. Similarly, in the US, there were 107,650 shares in the first twenty levels of the order book on the ask side, and 89,956 shares on the bid side, a sell-side imbalance of 1.2.

105. The Baiting Orders to sell placed by CIBC and/or its clients successfully induced the entry of sell orders from other market participants, driving the price of Quantum shares downward. As a result, between 10:33:22.399 and 10:33:22.436, CIBC and/or its clients executed two Executing Orders on the Canadian market to buy a total of 200 shares at \$2.80 CAD and \$2.81 CAD.

Time	Price (in CAD)	Shares	Buyer
2020-11-30 10:33:22.399	2.81	100	CIBC World Markets
2020-11-30 10:33:22.436	2.8	100	CIBC World Markets

106. Similarly, in the US, 52,640 shares traded at the bid, while only 2,938 shares traded at the ask during the pre-trade period, while the ask price in the US declined from \$2.30

USD to \$2.13 USD, a decline of 739 basis points. This trading imbalance continued as the Baiting Orders in Canada were canceled, with 16,750 shares trading at the bid in the 2 seconds after the Executing Orders and only 1,519 shares trading at the ask.

107. Through the Executing Orders, CIBC and/or its clients were able to purchase shares at prices below the prevailing best offer in Canada of \$3.00 CAD, which was the natural price before CIBC and/or its clients entered the Baiting Orders. Without the Baiting Orders, CIBC and/or its clients would have been required to pay the prevailing best offer price (or higher) to buy Quantum shares. Beginning at 10:33:17.943, as it was submitting and executing the Executing Orders, CIBC began canceling all of its Baiting Orders to sell on the Canadian market. The last Baiting Order was canceled at 10:33:24.260.

108. On November 30, 2020, at 15:36:36.611298934, the best bid and offer for Quantum on the US markets were \$2.19 USD and \$2.21 USD, respectively. Between 15:36:43.244 and 15:36:47.379, Defendant CIBC and/or its clients submitted 59 Baiting Orders to sell on the Canadian market, totaling 23,400 shares, at prices ranging from \$3.03 CAD to \$2.75 CAD.

109. Over this Baiting Period, CIBC and/or its clients placed more sell-side orders than buy-side orders, resulting in a significant sell-side imbalance in Canada. Similarly, in the US, there were 155,903 shares in the first twenty levels of the order book on the ask side, and 123,628 shares on the bid side, a sell-side imbalance of 1.26.

110. The Baiting Orders to sell placed by CIBC and/or its clients successfully induced the entry of sell orders from other market participants, driving the price of Quantum shares downward. As a result, between 15:36:47.369 and 15:36:47.380, CIBC and/or its clients

executed three Executing Orders on the Canadian market to buy a total of 800 shares between \$2.71 CAD and \$2.78 CAD as follows:

Time	Price (in CAD)	Shares	Buyer
2020-11-30 15:36:47.369	2.71	100	CIBC World Markets
2020-11-30 15:36:47.379	2.75	100	CIBC World Markets
2020-11-30 15:36:47.380	2.78	600	CIBC World Markets

111. Similarly, in the US, 18,819 shares traded at the bid, while 0 shares traded at the ask during the pre-trade period, while the ask price in the US declined from \$2.21 USD to \$2.08 USD, a decline of 588 basis points. This trading imbalance continued in the US as the Baiting Orders in Canada were canceled, with 27,474 shares trading at the bid in the 2 seconds after the Executing Orders and only 200 shares trading at the ask.

112. Through the Executing Orders, CIBC and/or its clients were able to purchase shares at prices below the prevailing best offer in Canada of \$2.89 CAD, which was the natural price before CIBC and/or its clients entered the Baiting Orders. Without the Baiting Orders, CIBC and/or its clients would have been required to pay the prevailing best offer price (or higher) to buy Quantum shares. Beginning at 15:36:43.427, CIBC and/or its clients began cancelling all of their Baiting Orders to sell on the Canadian market. The last Baiting Order was canceled at 15:36:49.241.

c) Example – February 10, 2021

113. On February 10, 2021, at 09:37:34.319000, the best bid and offer for Quantum on the US markets were \$3.77 USD and \$3.78 USD. Between 09:37:35.397000 and 09:37:39.316000, Defendant CIBC and/or its clients submitted 32 Baiting Orders to sell on the Canadian market, totaling 4,400 shares, at prices ranging from \$4.97 CAD to \$4.77 CAD.

114. Over this Baiting Period, CIBC and/or its clients placed mostly sell-side orders, resulting in significant sell-side imbalances in Canada. Similarly, in the US, there were 20,284

shares in the first ten levels of the order book on the ask side, and 15,347 shares on the bid side, a significant sell-side imbalance of 1.32.

115. The Baiting Orders to sell placed by CIBC and/or its clients successfully induced the entry of sell orders from other market participants, driving the price of Quantum shares downward. As a result, at 09:37:39.319000, CIBC and/or its clients executed an order on the Canadian market to buy 300 shares at a lower price of \$4.71 CAD.

116. In the US, at 09:37:39.309025, which is only 9.97 milliseconds prior to the Canadian Spoofing Episode, based on the methodology described in paragraphs 59 through 61, CIBC and/or its clients sent 34,400 Baiting Orders to the ask in the US markets, in addition to the spoofing in Canadian markets, resulting in a trade of size 2,292 being executed for a price of \$3.65 USD. After execution of this order, Baiting Orders were canceled in both US and Canadian markets.

117. From 09:46:43 until 10:29:59, Quantum sold 674,639 shares on the market at prices that were artificially depressed by the spoofing conduct described above.

d) Example – March 19, 2021

118. On March 19, 2021, at 11:55:08.693000, the best bid and offer for Quantum on the US markets were \$2.20 USD and \$2.21 USD. Between 11:55:13.648000 and 11:55:13.693000, Defendant CIBC and/or its clients submitted 12 Baiting Orders to sell on the Canadian market totaling 14,100 shares, at prices ranging from \$2.78 CAD to \$2.77 CAD.

119. Over this Baiting Period, CIBC and/or its clients placed mostly sell-side orders, resulting in significant sell-side imbalances in Canada. Similarly, in the US, there were 69,400 shares in the first ten levels of the order book on the ask side, and 52,000 shares on the bid side, a significant sell-side imbalance of 1.32.

120. The Baiting Orders to sell placed by CIBC and/or its clients successfully induced the entry of sell orders from other market participants, driving the price of Quantum shares downward. As a result, at 11:55:13.693000, CIBC and/or its clients executed an order on the Canadian market to buy 500 shares at a lower price of \$2.75 CAD.

121. In the US, at 11:55:13.691068, which is only 1.93 milliseconds prior to the Canadian Spoofing Episode, based on the methodology described in paragraphs 59 through 61, CIBC and/or its clients sent 9,270 Baiting Orders to the ask in the US markets, in addition to the spoofing in Canadian markets, resulting in a trade of size 130 being executed for a price of \$2.20 USD. After execution of this order, Baiting Orders were canceled in both US and Canadian markets.

122. At 12:12:28, Quantum sold 20,400 shares on the market at prices that were artificially depressed by the spoofing conduct described above.

e) Example – February 1, 2022

123. On February 1, 2022, at 10:14:02.772351563, the best bid and offer for Quantum on the US markets were \$0.86 USD and \$0.89 USD, respectively. Between 10:16:43.953 and 10:16:43.980, Defendant CIBC and/or its clients submitted 12 Baiting Orders to sell on the Canadian market, totaling 16,300 shares, at prices ranging from \$1.09 CAD down to \$1.07 CAD.

124. Over this Baiting Period, CIBC and/or its clients placed more sell-side orders than buy-side orders, resulting in a significant sell-side imbalance in Canada. Similarly, in the US, there were 91,595 shares in the first twenty levels of the order book on the ask side, and 24,774 shares on the bid side, a significant sell-side imbalance of 3.7.

125. The Baiting Orders to sell placed by CIBC and/or its clients successfully induced the entry of sell orders from other market participants, driving the price of Quantum shares downward. As a result, between 10:16:43.973400 and 10:16:43.992000, CIBC and/or its clients

executed four Executing Orders on the Canadian market to buy a total of 3,500 shares at lower prices ranging from \$1.05 CAD to \$1.07 CAD as follows:

Time	Price (in CAD)	Shares	Buyer
10:16:43.973400-05:00	1.07	500	CIBC World Markets
10:16:43.976000-05:00	1.05	500	CIBC World Markets
10:16:43.984600-05:00	1.05	500	CIBC World Markets
10:16:43.992000-05:00	1.05	2000	CIBC World Markets

126. Similarly, in the US, 3,414 shares traded at the bid, while 0 shares traded at the ask during the pre-trade period, while the ask price in the US declined from \$0.89 USD to \$0.8899 USD, a decline of 1.1 basis point (the mid-price in the US declined from \$0.875 USD to \$0.86985 USD, a decline of 58.8 basis points, while the ask price in Canada declined from \$1.09 CAD to \$1.07 CAD, a decline of 183 basis points). This trading imbalance continued as the Baiting Orders in Canada were canceled with 3,400 shares traded at the bid in the US while 0 shares traded at the ask.

127. Through the Executing Orders, CIBC and/or its clients were able to purchase shares at prices below the prevailing best offer in Canada of \$1.09 CAD, which was the natural price before CIBC and/or its clients entered the Baiting Orders. Without the Baiting Orders, CIBC and/or its clients would have been required to pay the prevailing best offer price (or higher) to buy Quantum shares. Beginning at 10:16:43.972, as it was submitting and executing the Executing Orders, CIBC began cancelling all of its Baiting Orders to sell on the Canadian market. The last Baiting Order was canceled at 10:16:43.997.

f) Example – June 5, 2024

128. On June 5, 2024, at 15:39:42.082000, the best bid and offer for Quantum on the US markets were \$0.258 USD and \$0.2637 USD, respectively. Between 15:39:46.9850000 and 15:39:47.082000, Defendant CIBC and/or its clients submitted 16 Baiting Orders to sell on the

Canadian market, totaling 227,500 shares, at prices ranging from \$0.38 CAD down to \$0.37 CAD.

129. Over this Baiting Period, CIBC and/or its clients placed more sell-side orders than buy-side orders, resulting in a significant sell-side imbalance in Canada. Similarly, in the US, there were 190,184 shares in the first twenty levels of the order book on the ask side, and 20,691 shares on the bid side, a massive sell-side imbalance of 9.2.

130. The Baiting Orders to sell placed by CIBC and/or its clients successfully induced the entry of sell orders from other market participants, driving the price of Quantum shares downward. As a result, between 15:39:46.990000 and 15:39:47.082000, CIBC and/or its clients executed nine Executing Orders on the Canadian market to buy a total of 5,000 shares at \$0.36 CAD as follows:

Time	Price (in CAD)	Shares	Buyer
2024-06-05 15:39:47.082	0.36	1000	CIBC World Markets
2024-06-05 15:39:46.989	0.36	500	CIBC World Markets
2024-06-05 15:39:46.990	0.36	500	CIBC World Markets
2024-06-05 15:39:46.990	0.36	500	CIBC World Markets
2024-06-05 15:39:46.990	0.36	500	CIBC World Markets
2024-06-05 15:39:46.990	0.36	500	CIBC World Markets
2024-06-05 15:39:46.990	0.36	500	CIBC World Markets
2024-06-05 15:39:46.990	0.36	500	CIBC World Markets
2024-06-05 15:39:46.990	0.36	500	CIBC World Markets

131. Similarly, in the US, 4,878 shares traded at the bid, while 0 shares traded at the ask during the pre-trade period, while the ask price in the US declined from \$0.2637 to \$0.26, a decline of 140 basis points. 1,000 shares traded at the ask in the US in the event window after the Executing Orders traded.

132. Through the Executing Orders, CIBC and/or its clients were able to purchase shares at prices below the prevailing best offer in Canada of \$0.37 CAD, which was the natural price before CIBC and/or its clients entered the Baiting Orders. Without the Baiting Orders,

CIBC and/or its clients would have been required to pay the prevailing best offer price (or higher) to buy Quantum shares. In the two seconds following the execution of the Executing Orders, CIBC and/or its clients canceled all 227,500 of the shares posted at or above the best ask with the last order canceled at 15:39:48.804.

g) Example – June 14, 2024

133. On June 14, 2024, at 10:02:12.278595867, the best bid and offer for Quantum on the US markets were \$0.2041 USD and \$0.2099 USD, respectively. Between 10:06:19.947 and 10:06:20.050, Defendant CIBC and/or its clients submitted 16 Baiting Orders to sell on the Canadian market, totaling 282,500 shares, at \$0.29 CAD.

134. Over this Baiting Period, CIBC and/or its clients placed more sell-side orders than buy-side orders, resulting in a significant sell-side imbalance in Canada. Similarly, in the US, there were 160,824 shares in the first twenty levels of the order book on the ask side, and 33,452 shares on the bid side, a massive sell-side imbalance of 4.8.

135. The Baiting Orders to sell placed by CIBC and/or its clients successfully induced the entry of sell orders from other market participants, driving the price of Quantum shares downward. As a result, between 10:06:20.045 and 10:06:20.053, CIBC and/or its clients executed two Executing Orders on the Canadian market to buy a total of 1,000 shares at \$0.28 CAD as follows:

Time	Price (in CAD)	Shares	Buyer
2024-06-14 10:06:20.045	0.28	500	CIBC World Markets
2024-06-14 10:06:20.053	0.28	500	CIBC World Markets

136. Similarly, in the US, 11,105 shares traded at the bid, while only 1,500 shares traded at the ask during the pre-trade period, while the ask price in the US declined from \$0.2099

USD to \$0.1999 USD, a decline of 476 basis points. No shares traded in the US in the event window after the Executing Orders traded.

137. Through the Executing Orders, CIBC and/or its clients were able to purchase shares at prices below the prevailing best offer in Canada of \$0.29 CAD, which was the natural price before CIBC and/or its clients entered the Baiting Orders. Without the Baiting Orders, CIBC and/or its clients would have been required to pay the prevailing best offer price (or higher) to buy Quantum shares. In the two seconds following the execution of the Executing Orders, CIBC and/or its clients canceled all 282,500 shares posted at or above the best ask.

138. On June 14, 2024, at 10:25:40.159771299, the best bid and offer for Quantum on the US markets were \$0.1939 USD and \$0.199 USD, respectively. Between 10:26:48.503 and 10:26:52.666, Defendant CIBC and/or its clients submitted 44 Baiting Orders to sell on the Canadian market, totaling 144,000 shares, at prices ranging from \$0.295 CAD down to \$0.27 CAD.

139. Over this Baiting Period, CIBC and/or its clients placed more sell-side orders than buy-side orders, resulting in a significant sell-side imbalance in Canada. Similarly, in the US, there were 194,036 shares in the first twenty levels of the order book on the ask side, and 38,697 shares on the bid side, a massive sell-side imbalance of 5.

140. The Baiting Orders to sell placed by CIBC and/or its clients successfully induced the entry of sell orders from other market participants, driving the price of Quantum shares downward. As a result, between 10:26:52.655 and 10:26:52.666, CIBC and/or its clients executed two Executing Orders on the Canadian market to buy a total of 2,000 shares at \$0.26 CAD as follows:

Time	Price (in CAD)	Shares	Buyer
2024-06-14 10:26:52.655	0.26	1500	CIBC World Markets
2024-06-14 10:26:52.666	0.26	500	CIBC World Markets

141. Although there was no trading imbalance in the US, the ask price in the US declined from \$0.199 USD to \$0.196 USD, a decline of 151 basis points. No shares traded in the US in the event window after the Executing Orders traded.

142. Through the Executing Orders, CIBC and/or its clients were able to purchase shares at price below the prevailing best offer in Canada of \$0.285 CAD, which was the natural price before CIBC and/or its clients entered the Baiting Orders. Without the Baiting Orders, CIBC and/or its clients would have been required to pay the prevailing best offer price (or higher) to buy Quantum shares. In the two seconds following the execution of the Executing Orders, CIBC and/or its clients canceled all 144,000 shares posted at or above the best ask.

143. These spoofing cycles continued throughout the course of the trading day, with 20 total events by CIBC on June 14, 2024, placing continuous downward pressure on Quantum's share price and causing a diminution of that price.

2. **Defendant RBC**

a) Example – August 10, 2020

144. On August 10, 2020, at 11:08:07.444670187, the best bid and offer for Quantum on the US markets were \$2.99 USD and \$3.02 USD, respectively. Between 11:09:38.1117021 and 11:09:40.741650, Defendant RBC and/or its clients submitted 9 Baiting Orders to sell on the Canadian market, totaling 3,700 shares at prices ranging from \$4.09 CAD down to \$4.05 CAD.

145. Over this Baiting Period, RBC and/or its clients placed more sell-side orders than buy-side orders, resulting in a significant sell-side imbalance in Canada. Similarly, in the US, there were 43,721 shares in the first twenty levels of the order book on the ask side, and 33,255 shares on the bid side, a significant sell-side imbalance of 1.31.

146. The Baiting Orders to sell placed by RBC and/or its clients successfully induced the entry of sell orders from other market participants, driving the price of Quantum shares downward. As a result, at 11:09:40.742, RBC and/or its clients executed one Executing Order on the Canadian market to buy a total of 2,000 shares at \$4.00 CAD as follows:

Time	Price (in CAD)	Shares	Buyer
2020-08-10 11:09:40.742000	4	2,000	RBC

147. In the US, the ask price declined from \$3.02 USD to \$2.99 USD, a decline of 99 basis points.

148. Through the Executing Orders, RBC and/or its clients were able to purchase shares at prices below the prevailing best offer in Canada of \$4.05 CAD, which was the natural price before RBC and/or its clients entered the Baiting Orders. Without the Baiting Orders, RBC and/or its clients would have been required to pay the prevailing best offer price (or higher) to buy Quantum shares. In the two seconds following the execution of the Executing Orders, RBC and/or its clients canceled all 3,700 of the shares posted at or above the best ask.

b) Example – March 17, 2021

149. On March 17, 2021, at 15:33:58.766, the best bid and offer for Quantum on the US markets were \$2.38 USD and \$2.39 USD, respectively. Between 15:33:59.001 and 15:34:02.795, Defendant RBC and/or its clients submitted 14 Baiting Orders to sell on the Canadian market, totaling 9,200 shares at \$2.97 CAD.

150. Over this Baiting Period, RBC and/or its clients placed more sell-side orders than buy-side orders, resulting in a significant sell-side imbalance in Canada. Similarly, in the US, there were 351,604 shares in the first twenty levels of the order book on the ask side, and 319,354 shares on the bid side, a sell-side imbalance of 1.1.

151. The Baiting Orders to sell placed by RBC and/or its clients successfully induced the entry of sell orders from other market participants, driving the price of Quantum shares downward. As a result, at 15:34:03.766, RBC and/or its clients executed five Executing Orders on the Canadian market to buy a total of 2,000 shares at \$2.95 CAD as follows:

Time	Price (in CAD)	Shares	Buyer
2021-03-17 15:34:03.766000	2.95	800	RBC
2021-03-17 15:34:03.766000	2.95	600	RBC
2021-03-17 15:34:03.766000	2.95	200	RBC
2021-03-17 15:34:03.766000	2.95	200	RBC
2021-03-17 15:34:03.766000	2.95	200	RBC

152. Similarly, in the US, 2,960 shares traded at the bid, while only 24 shares traded at the ask during the pre-trade period, while the ask price declined from \$2.39 USD to \$2.38 USD, a decline of 42 basis points. No shares traded in the event window after the Executing Orders.

153. Through the Executing Orders, RBC and/or its clients were able to purchase shares at prices below the prevailing best offer in Canada of \$2.97 CAD, which was the natural price before RBC and/or its clients entered the Baiting Orders. Without the Baiting Orders, RBC and/or its clients would have been required to pay the prevailing best offer price (or higher) to buy Quantum shares. In the two seconds following the execution of the Executing Orders, RBC and/or its clients canceled 8,800 shares posted at or above the best ask.

c) Example – May 3, 2021

154. On May 3, 2021, at 11:47:58.992867859, the best bid and offer for Quantum on the US markets were \$1.76 USD and \$1.77, respectively. Between 11:48:11.967262 and 11:48:14.020900, Defendant RBC and/or its clients flashed 6 Baiting Orders to sell on the Canadian market, totaling 14,100 shares at \$2.18 CAD.

155. Over this Baiting Period, RBC and/or its clients placed more sell-side orders than buy-side orders, resulting in a significant sell-side imbalance in Canada. Similarly, in the US,

there were 150,607 shares in the first twenty levels of the order book on the ask side, and 87,728 shares on the bid side, a large sell-side imbalance of 1.72.

156. The Baiting Orders to sell placed by RBC and/or its clients successfully induced the entry of sell orders from other market participants, driving the price of Quantum shares downward. As a result, at 11:48:14.123, RBC and/or its clients executed two Executing Orders on the Canadian market to buy a total of 200 shares at \$2.16 CAD as follows:

Time	Price (in CAD)	Shares	Buyer
2021-05-03 11:48:14.123	2.16	100	RBC
2021-05-03 11:48:14.138	2.16	100	RBC

157. Similarly, in the US, 10,549 shares traded at the bid, while 0 shares traded at the ask during the pre-trade period, and the ask price in the US declined from \$1.77 USD to \$1.76 USD, a decline of 56.5 basis points. No shares traded at the bid, and 100 shares traded at the ask in the event window after the Executing Orders traded.

158. Through the Executing Orders, RBC and/or its clients were able to purchase shares at prices below the prevailing best offer in Canada of \$2.18 CAD, which was the natural price before RBC and/or its clients entered the Baiting Orders. Without the Baiting Orders, RBC and/or its clients would have been required to pay the prevailing best offer price (or higher) to buy Quantum shares. During this episode, immediately before the Executing Orders were filled, RBC and/or its clients canceled all 14,100 of the shares posted at or above the best ask.

159. In addition, in the US, at 11:48:14.121341, which is only 4.66 milliseconds prior to the Canadian Spoofing Episode, based on the methodology described in paragraphs 59 through 61, RBC and/or its clients sent 51,053 Baiting Orders to the ask in the US markets, in addition to the spoofing in Canadian markets, resulting in a trade of size 5,803 being executed

for a price of \$1.76 USD. After execution of this order, Baiting Orders were canceled in both US and Canadian markets.

d) Example – September 2, 2021

160. On September 2, 2021, at 11:49:50.054930977, the best bid and offer for Quantum on the US markets were \$1.80 USD and \$1.82 USD, respectively. At 11:50:02.074700 and 11:50:02.119744, Defendant RBC and/or its clients flashed 2 Baiting Orders to sell on the Canadian market, totaling 8,400 shares at \$2.28 CAD and \$2.29 CAD.

161. Over this Baiting Period, RBC and/or its clients placed more sell-side orders than buy-side orders, resulting in a significant sell-side imbalance in Canada. Similarly, in the US, there were 63,917 shares in the first twenty levels of the order book on the ask side, and 33,437 shares on the bid side, a large sell-side imbalance of 1.91.

162. The Baiting Orders to sell placed by RBC and/or its clients successfully induced the entry of sell orders from other market participants, driving the price of Quantum shares downward. As a result, starting at 11:50:02.153000, RBC and/or its clients executed four Executing Orders on the Canadian market to buy a total of 495 shares at \$2.25 CAD as follows:

Time	Price (in CAD)	Shares	Buyer
2021-09-02 11:50:02.153	2.25	100	RBC
2021-09-02 11:50:02.157	2.25	100	RBC
2021-09-02 11:50:02.166	2.25	200	RBC
2021-09-02 11:50:04.164	2.25	95	RBC

163. Similarly, in the US, 15,344 shares traded at the bid, while only 546 shares traded at the ask during the pre-trade period, and the ask price in the US declined from \$1.82 USD to \$1.79 USD, a decline of 165 basis points. 629 shares traded at the bid, and 0 shares traded at the ask in the event window after the Executing Orders traded.

164. Through the Executing Orders, RBC and/or its clients were able to purchase shares at prices below the prevailing best offer in Canada of \$2.29 CAD, which was the natural price before RBC and/or its clients entered the Baiting Orders. Without the Baiting Orders, RBC and/or its clients would have been required to pay the prevailing best offer price (or higher) to buy Quantum shares. During this episode, immediately before the Executing Orders were filled, RBC and/or its clients canceled all 8,400 shares posted at or above the best ask.

3. John Doe 1

165. As noted above, the Canadian market by order data enables one to track offers and trades made by or through particular brokers. However, individual orders and trades do not have to be identified; instead, brokers can use an anonymous ID to mask their identity (although they lose broker priority if they choose to do so). One or more brokers using Anonymous ID #1 engaged in extensive spoofing during the Relevant Period, as illustrated by the examples below. This broker or these brokers are referred to herein as John Doe 1.

a) Example – June 4, 2020

166. On June 4, 2020, at 10:28:47.164, the best bid and offer for Quantum on the US markets were \$6.46 USD and \$6.55 USD, respectively. Between 10:28:46.621 and 10:28:57.131, Defendant John Doe 1 and/or its clients submitted 269 Baiting Orders to sell on the Canadian market, totaling 56,100 shares at prices ranging from \$8.95 CAD down to \$8.63 CAD.

167. Over this Baiting Period, John Doe 1 and/or its clients placed more sell-side orders than buy-side orders, resulting in a significant sell-side imbalance in Canada. While in the US there was no significant imbalance (34,795 shares at the ask and 36,044 shares at the bid), there was a distinct pattern starting at 10:28:45.074436. At that time, waves of 100-share orders were repeatedly placed and canceled within milliseconds on BATS and Nasdaq:

Side	Price (in USD)	Size	Timestamp (UTC)	Action	Exchange
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ASK	6.61	100	10:28:45.074436	INSERT	BATS
ASK	6.61	100	10:28:45.075464694	INSERT	XNAS
ASK	6.56	100	10:28:45.082645	INSERT	BATS
ASK	6.56	100	10:28:45.082699241	INSERT	XNAS
ASK	6.57	100	10:28:45.083082	INSERT	BATS
ASK	6.57	100	10:28:45.083349865	INSERT	XNAS
ASK	6.58	100	10:28:45.083505	INSERT	BATS
ASK			10:28:45.083679	REMOVE	BATS
ASK			10:28:45.083686	REMOVE	BATS
ASK			10:28:45.083816090	REMOVE	XNAS
ASK			10:28:45.083943	REMOVE	BATS
ASK			10:28:45.084556859	REMOVE	XNAS
ASK			10:28:45.106112	REMOVE	BATS
ASK			10:28:45.106146209	REMOVE	XNAS

168. This pattern repeated itself over 20 times in the next 5 seconds with 10,300 shares being flashed on the “ask” and then almost immediately canceled.

169. The Baiting Orders to sell placed by John Doe 1 and/or its clients successfully induced the entry of sell orders from other market participants, driving the price of Quantum shares downward. As a result, starting at 10:28:51.618, John Doe 1 and/or its clients executed fourteen Executing Orders on the Canadian market to buy a total of 1,400 shares at prices ranging from \$8.755 CAD to \$8.62 CAD as follows:

Time	Price (in CAD)	Shares	Buyer
2020-06-04 10:28:51.618	8.755	100	Anonymous
2020-06-04 10:28:51.702	8.71	100	Anonymous
2020-06-04 10:28:51.702	8.71	100	Anonymous
2020-06-04 10:28:53.733	8.7	100	Anonymous
2020-06-04 10:28:53.766	8.7	100	Anonymous
2020-06-04 10:28:53.796	8.7	100	Anonymous
2020-06-04 10:28:53.825	8.7	100	Anonymous
2020-06-04 10:28:53.858	8.7	100	Anonymous
2020-06-04 10:28:53.888	8.7	100	Anonymous
2020-06-04 10:28:53.917	8.7	100	Anonymous
2020-06-04 10:28:55.879	8.69	100	Anonymous
2020-06-04 10:28:55.881	8.68	100	Anonymous
2020-06-04 10:28:56.125	8.63	100	Anonymous
2020-06-04 10:28:57.164	8.62	100	Anonymous

170. Similarly, in the US, 979 shares traded at the bid, while 0 shares traded at the ask during the pre-trade period, and the ask price in the US declined from \$6.55 USD to \$6.46 USD, a decline of 137 basis points. No shares traded at the bid or the ask in the event window after the Executing Orders traded.

171. Through the Executing Orders, John Doe 1 and/or its clients were able to purchase shares at prices below the prevailing best offer in Canada of \$8.81 CAD, which was the natural price before John Doe 1 and/or its clients entered the Baiting Orders. Without the Baiting Orders, John Doe 1 and/or its clients would have been required to pay the prevailing best offer price (or higher) to buy Quantum shares. While executing the Executing Orders, starting 10:28:46.678, John Doe 1 and/or its clients canceled all of the Baiting Orders posted at or above the best ask, with the last order canceled at 10:28:58.212.

172. These spoofing cycles continued throughout the course of the trading day, with 158 total events under the Anonymous ID #1 on June 14, 2020, placing continuous downward pressure on Quantum's share price and causing a diminution of that price.

b) Example – July 22, 2020

173. On July 22, 2020, at 11:55:40.203000, the best bid and offer for Quantum on US markets were \$3.84 USD and \$3.92 USD. Between 11:55:44.993000 and 11:55:45.106000, Defendant John Doe and/or its clients submitted 7 Baiting Orders to sell on the Canadian market totaling 2,900, at prices ranging from \$5.49 CAD to \$5.30 CAD.

174. Over this Baiting Period, John Doe and/or its clients placed mostly sell-side orders, resulting in significant sell-side imbalances in Canada. Similarly, in the US, there were 79,140 shares in the first ten levels of the order book on the ask side, and 3,523 shares on the bid side, a significant sell-side imbalance of 22.46.

175. The Baiting Orders to sell placed by John Doe and/or its clients successfully induced the entry of sell orders from other market participants, driving the price of Quantum shares downward. As a result, at 11:55:45.203000, John Doe and/or its clients executed an order on the Canadian market to buy 100 shares at a lower price of \$5.15 CAD.

176. In the US, at 11:55:45.202155, which is only 0.85 milliseconds prior to the Canadian spoofing event, based on the methodology described in paragraphs 59 through 61, John Doe and/or its clients sent 3,227 Baiting Orders to the ask in the US markets, in addition to the spoofing in Canadian markets, resulting in a trade of size 100 being executed for a price of \$3.80 USD. After execution of this order, Baiting Orders were canceled in both US and Canadian markets.

177. From 11:56:41 to 12:54:47, Quantum sold 800 shares on the market at prices that were artificially depressed by the spoofing conduct described above.

c) Example – November 30, 2020

178. On November 30, 2020, at 11:03:59.436780223, the best bid and offer for Quantum on the US markets were \$2.01 USD and \$2.03 USD, respectively. Between 11:04:00.014 and 11:04:04.698, Defendant John Doe 1 and/or its clients submitted 22 Baiting Orders to sell on the Canadian market, totaling 28,500 shares at prices ranging from \$2.68 CAD down to \$2.60 CAD.

179. Over this Baiting Period, John Doe 1 and/or its clients placed more sell-side orders than buy-side orders, resulting in a significant sell-side imbalance in Canada. Similarly, in the US, while there was not an ask-side imbalance in the first twenty levels of the order book, there was when additional levels were considered. At 25 levels, there were 133,467 shares on the ask and 123,509 shares on the bid, a sell-side imbalance of 1.08. At 40 levels, there were 243,493 shares on the ask and 205,055 shares on the bid, a sell-side imbalance of 1.21.

180. The Baiting Orders to sell placed by John Doe 1 and/or its clients successfully induced the entry of sell orders from other market participants, driving the price of Quantum shares downward. As a result, from 11:04:04.501 to 11:04:04.705, John Doe 1 and/or its clients executed seven Executing Orders on the Canadian market to buy a total of 700 shares at prices ranging from \$2.59 CAD down to \$2.53 CAD as follows:

Time	Price (in CAD)	Shares	Buyer
2020-11-30 11:04:04.501	2.59	100	Anonymous
2020-11-30 11:04:04.501	2.59	100	Anonymous
2020-11-30 11:04:04.503	2.59	100	Anonymous
2020-11-30 11:04:04.685	2.53	100	Anonymous
2020-11-30 11:04:04.690	2.53	100	Anonymous
2020-11-30 11:04:04.700	2.53	100	Anonymous
2020-11-30 11:04:04.705	2.53	100	Anonymous

181. Similarly, in the US, 14,099 shares traded at the bid, while 0 shares traded at the ask during the pre-trade period, and the ask price in the US declined from \$2.03 USD to \$2.00 USD, a decline of 150 basis points. 27,345 shares traded at the bid, and only 100 shares traded at the ask in the event window after the Executing Orders traded.

182. Through the Executing Orders, John Doe 1 and/or its clients were able to purchase shares at prices below the prevailing best offer in Canada of \$2.68 CAD, which was the natural price before John Doe 1 and/or its clients entered the Baiting Orders. Without the Baiting Orders, John Doe 1 and/or its clients would have been required to pay the prevailing best offer price (or higher) to buy Quantum shares. Starting at 11:04:01.743, John Doe 1 and/or its clients canceled all of the Baiting Orders posted at or above the best ask, with the last order canceled at 11:04:06.526.

183. These spoofing cycles continued throughout the course of the trading day, with 30 total events under the Anonymous ID #1 on November 30, 2020, placing continuous downward pressure on Quantum's share price and causing a diminution of that price.

d) Example – February 1, 2021

184. On February 1, 2021, at 09:57:37.002000, the best bid and offer for Quantum on US markets were \$2.00 USD and \$2.02 USD. Between 09:57:39.420000 and 09:57:41.233000, Defendant John Doe and/or its clients submitted 12 Baiting Orders to sell on the Canadian market totaling 7,500 shares, at prices ranging from \$2.66 CAD to \$2.60 CAD.

185. The Baiting Orders to sell placed by John Doe and/or its clients successfully induced the entry of sell orders from other market participants, driving the price of Quantum shares downward. As a result, at 09:57:42.002000, John Doe and/or its clients executed an order on the Canadian market to buy 100 shares at a lower price of \$2.52 CAD.

186. In the US, at 09:57:41.992335, which is only 9.676 milliseconds prior to the Canadian Spoofing Event, based on the methodology described in paragraphs 59 through 61, John Doe and/or its clients sent 13,850 Baiting Orders to the ask in the US markets, in addition to the spoofing in Canadian markets, resulting in a trade of size 241 being executed for a price of \$1.97 USD. After execution of this order, Baiting Orders were canceled in both US and Canadian markets.

187. From 10:39:29 to 10:43:56, Quantum sold 12,000 shares on the market at prices that were artificially depressed by the spoofing conduct described above.

e) Example – February 9, 2021

188. On February 9, 2021, at 12:32:21.897683711, the best bid and offer for Quantum on the US markets were \$3.28 USD and \$3.20 USD, respectively. Between 12:32:22.431 and 12:32:26.889, Defendant John Doe 1 and/or its clients submitted 20 Baiting Orders to sell on the Canadian market, totaling 9,800 shares at prices ranging from \$4.12 CAD down to \$4.24 CAD.

189. Over this Baiting Period, John Doe 1 and/or its clients placed more sell-side orders than buy-side orders, resulting in a significant sell-side imbalance in Canada. Similarly, in

the US, there were 77,761 shares in the first twenty levels of the order book on the ask side, and 60,111 shares on the bid side, a sell-side imbalance of 1.29.

190. The Baiting Orders to sell placed by John Doe 1 and/or its clients successfully induced the entry of sell orders from other market participants, driving the price of Quantum shares downward. As a result, at 12:32:26.935, John Doe 1 and/or its clients executed four Executing Orders on the Canadian market to buy a total of 800 shares at \$4.06 CAD as follows:

Time	Price (in CAD)	Shares	Buyer
2021-02-09 12:32:26.935	4.06	400	Anonymous
2021-02-09 12:32:26.935	4.06	100	Anonymous
2021-02-09 12:32:26.935	4.06	200	Anonymous
2021-02-09 12:32:26.935	4.06	100	Anonymous

191. Similarly, in the US, 10,647 shares traded at the bid, while only 2,487 shares traded at the ask during the pre-trade period, and the ask price in the US declined from \$3.30 USD to \$3.19 USD, a decline of 333 basis points. 100 shares traded at the bid, and 1,026 shares traded at the ask in the event window after the Executing Orders traded.

192. Through the Executing Orders, John Doe 1 and/or its clients were able to purchase shares at prices below the prevailing best offer in Canada of \$4.22 CAD, which was the natural price before John Doe 1 and/or its clients entered the Baiting Orders. Without the Baiting Orders, John Doe and/or its clients would have been required to pay the prevailing best offer price (or higher) to buy Quantum shares. Starting at 12:32:22.440, John Doe 1 and/or its clients canceled all of the Baiting Orders posted at or above the best ask, with the last order canceled at 12:32:27.346.

193. These spoofing cycles continued throughout the course of the trading day, with 19 total events under the Anonymous ID #1 on February 9, 2021, placing continuous downward pressure on Quantum's share price and causing a diminution of that price.

f) Example – February 11, 2021

194. On February 11, 2021, at 15:13:05.557000, the best bid and offer for Quantum on US markets were \$3.03 USD and \$3.04 USD. Between 15:13:10.496000 and 15:13:10.542000, Defendant John Doe and/or its clients submitted 7 Baiting Orders to sell on the Canadian market totaling 3,400, at prices ranging from \$3.90 CAD to \$3.89 CAD.

195. The Baiting Orders to sell placed by John Doe and/or its clients successfully induced the entry of sell orders from other market participants, driving the price of Quantum shares downward. As a result, at 15:13:10.557000, John Doe and/or its clients executed an order on the Canadian market to buy 100 shares at a lower price of \$3.84 CAD.

196. In the US, at 15:13:10.553059, which is only 3.94 milliseconds prior to the Canadian Spoofing Event, based on the methodology described in paragraphs 59 through 61, John Doe and/or its clients sent 11,942 Baiting Orders to the ask in the US markets, in addition to the spoofing in the Canadian markets, resulting in a trade of size 602 being executed for a price of \$3.01 USD. After execution of this order, Baiting Orders were canceled in both US and Canadian markets.

197. At 15:59:58, Quantum sold 1,365,775 shares on the market at prices that were artificially depressed by the spoofing conduct described above.

G. Defendants' Spoofing Caused Quantum to Suffer Significant Losses

198. During the Relevant Period, Quantum sold or issued for value approximately 90 million Quantum shares. As set forth below, many of the Defendants' Spoofing Episodes occurred immediately prior to Quantum's sales or issuances. Because Quantum sold or issued for value Quantum shares during the Relevant Period at times when the prices of those shares were artificially deflated due to Defendants' spoofing, Quantum was directly damaged by Defendants' unlawful conduct.

199. Each Spoofing Episode was intended to and had a significant immediate impact on the price of Quantum's shares, and the cumulative impacts of Defendants' manipulative trading practices lingered far longer.

1. Injury in Fact and Loss Causation

200. Defendants' fraudulent trading activities artificially depressed the price at which Quantum was able to sell its shares during the Relevant Period.

201. During the Relevant Period, the Spoofing Events occurred on at least 159 out of 1,129—or 14%—of trading days. These events are summarized by the table below:

Date	Total
8-Jan-20	3
9-Jan-20	8
10-Jan-20	4
13-Jan-20	13
15-Jan-20	9
21-Jan-20	4
22-Jan-20	3
29-Jan-20	2
28-Feb-20	9
5-Mar-20	1
6-Mar-20	1
10-Mar-20	4
11-Mar-20	1
24-Mar-20	1
25-Mar-20	5
26-Mar-20	8
2-Apr-20	8
15-Apr-20	2
21-Apr-20	1
8-May-20	2
19-May-20	9
3-Jun-20	151
4-Jun-20	227
5-Jun-20	15
8-Jun-20	9
9-Jun-20	1

10-Jun-20	9
11-Jun-20	3
12-Jun-20	6
23-Jun-20	3
25-Jun-20	21
26-Jun-20	6
30-Jun-20	2
2-Jul-20	20
22-Jul-20	1
24-Jul-20	3
30-Jul-20	214
31-Jul-20	4
4-Aug-20	15
5-Aug-20	1
7-Aug-20	4
10-Aug-20	9
11-Aug-20	3
12-Aug-20	3
13-Aug-20	4
20-Aug-20	22
1-Sep-20	1
4-Sep-20	5
30-Sep-20	1
1-Oct-20	2
20-Oct-20	3
22-Oct-20	14
6-Nov-20	4
9-Nov-20	2
10-Nov-20	10
13-Nov-20	2
18-Nov-20	1
24-Nov-20	2
30-Nov-20	45
1-Dec-20	9
6-Jan-21	2
20-Jan-21	3
1-Feb-21	1
3-Feb-21	13
8-Feb-21	4
9-Feb-21	24
10-Feb-21	19

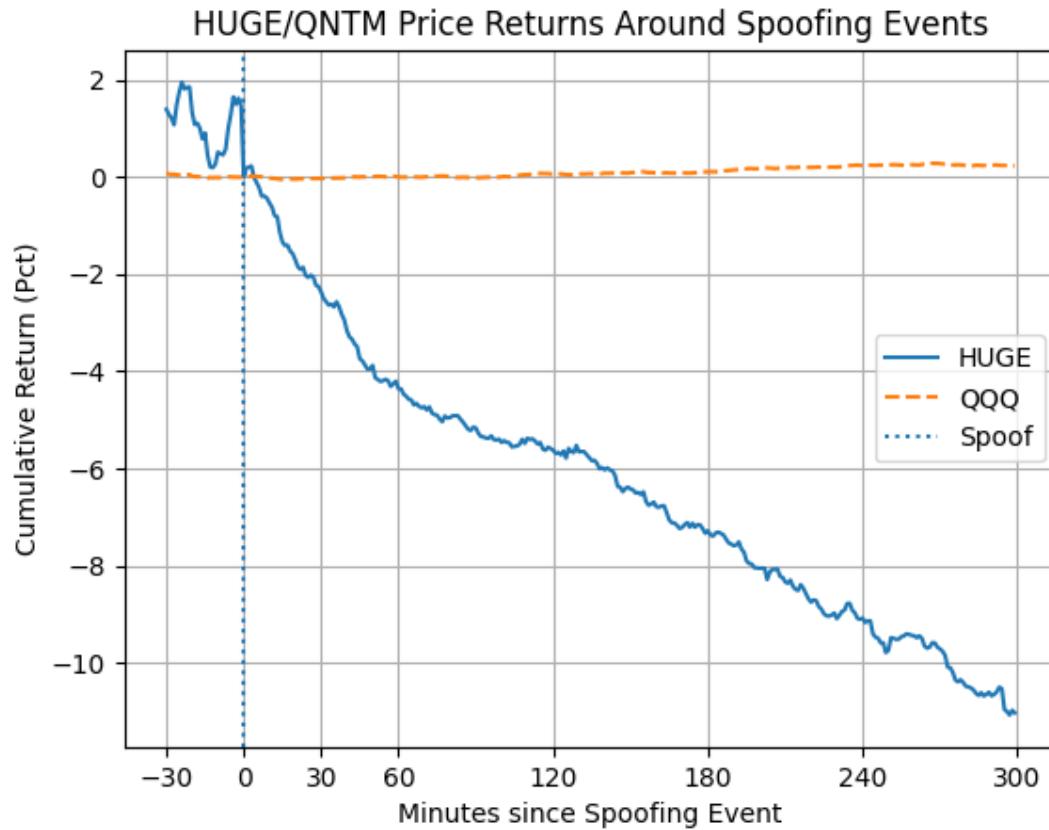
11-Feb-21	27
16-Feb-21	4
17-Feb-21	3
18-Feb-21	4
19-Feb-21	2
22-Feb-21	2
23-Feb-21	3
24-Feb-21	3
1-Mar-21	1
2-Mar-21	4
15-Mar-21	1
16-Mar-21	7
17-Mar-21	30
18-Mar-21	12
19-Mar-21	8
22-Mar-21	2
23-Mar-21	4
24-Mar-21	3
25-Mar-21	7
26-Mar-21	5
29-Mar-21	2
30-Mar-21	6
5-Apr-21	2
6-Apr-21	3
7-Apr-21	2
8-Apr-21	11
19-Apr-21	3
23-Apr-21	1
26-Apr-21	3
28-Apr-21	7
30-Apr-21	5
3-May-21	2
9-Jun-21	3
6-Jul-21	1
26-Aug-21	4
2-Sep-21	4
15-Sep-21	3
16-Sep-21	4
20-Sep-21	9
4-Oct-21	18
5-Oct-21	1

6-Oct-21	11
5-Nov-21	1
10-Nov-21	3
16-Nov-21	2
22-Nov-21	3
26-Nov-21	1
6-Jan-22	1
28-Jan-22	1
1-Feb-22	2
28-Mar-22	4
15-Jun-22	3
24-Jun-22	5
15-Jul-22	1
31-Oct-22	7
23-Nov-22	1
20-Jan-23	1
25-Jan-23	1
9-Feb-23	4
13-Feb-23	1
14-Feb-23	1
22-Feb-23	1
23-Feb-23	2
6-Mar-23	17
7-Mar-23	1
15-Mar-23	1
10-Apr-23	5
13-Apr-23	1
18-Apr-23	2
19-Apr-23	3
1-Jun-23	11
15-Jun-23	3
29-Jun-23	14
2-Aug-23	3
3-Aug-23	1
15-Aug-23	1
27-Sep-23	1
2-Nov-23	11
17-Nov-23	1
1-Dec-23	1
9-Jan-24	1
29-Jan-24	1

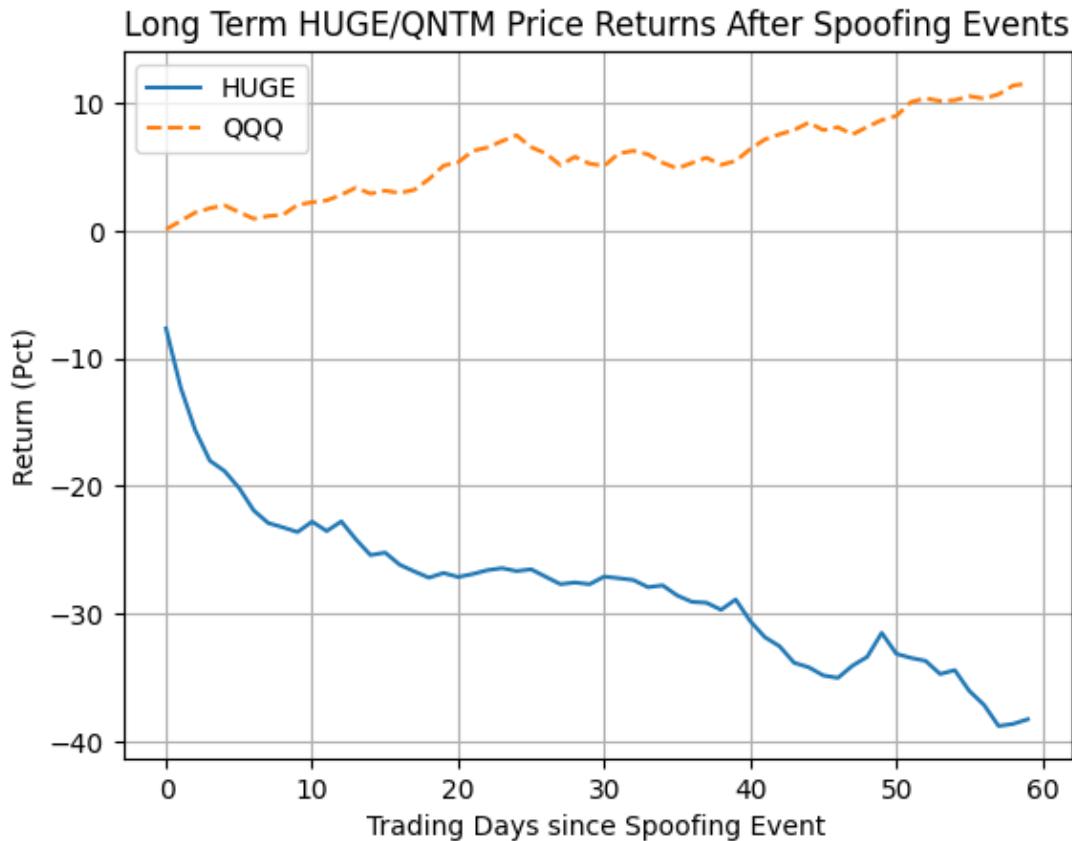
21-Feb-24	1
11-Mar-24	1
14-Mar-24	1
15-Apr-24	4
26-Apr-24	4
2-May-24	1
31-May-24	1
7-Jun-24	5
14-Jun-24	5
9-Aug-24	16
Total	1,422

202. Those events had lasting impacts. On average, during the spoofing period, the price of Quantum shares decreased by between 64 and 122 basis points, compared to an average decrease of 1.38 basis points during non-spoofing periods. Prices generally remained at suppressed levels (compared to non-spoofing periods) for hours—or more—after each Executing Purchase.

203. Available evidence indicates that Defendants' spoofing had a persistent and long-lasting price impact on the share price of Quantum, even when adjusted for market-wide price movements. The following graph shows the average cumulative return (percentage price change) across Spoofing Episodes identified by Quantum's analysis—from thirty minutes prior to each Executing Purchase to the end of the trading day. The blue line shows Quantum's return, while the orange line shows, for comparison, the return on the Nasdaq Composite Index.



204. In addition, available evidence also indicates that the sustained, repetitive, and continuous stream of Defendants' spoofing had a persistent long-term negative impact on the price of Quantum's shares. The following graph shows the average change in Quantum share price for the days that followed each Spoofing Episode, as well as the average changes in the Nasdaq composite index over that same time period.



205. The precise amount of time that the impacts of Defendants' spoofing episodes lasted is an empirical question that will be resolved after discovery. Recent opinions in this district indicate, however, that spoofing may suppress prices for hours or days. *See Mullen Auto., Inc. v. IMC Fin. Mkts.*, 2025 WL 951501, at *8 (S.D.N.Y. Mar. 28, 2025) (days); *Nw. Biotherapeutics, Inc. v. Canaccord Genuity LLC*, 2025 WL 934319, at *8–13 (S.D.N.Y. Mar. 26, 2025) (remainder of trading day).

206. Consistent with this, sharp price decreases in Quantum share prices correlate with Defendants' spoofing activities. For example, from June 3, 2020, to June 12, 2020, the price of Quantum dropped from \$910 to \$273; over that period, there were 550 spoofing episodes. From February 9, 2021, to February 26, 2021, the price of Quantum dropped by over 29%; over that period, there were 136 spoofing episodes. From March 16, 2021, to April 6, 2021, the price of

Quantum dropped by over 10%; over that period, there were 304 spoofing episodes. From April 10, 2023, to April 19, 2023, the price of Quantum dropped by nearly 20%; over that period, there were 21 spoofing episodes.

207. In total, during the Relevant Period, at least 5% of all trading in Quantum shares occurred at artificially depressed levels. In addition, 3.72% of all trading days have trading volume where over 10% of all volume was traded at artificially depressed levels. The numbers are, of course, higher on some days: on thirteen days, more than 25% of all volume was traded at artificially depressed prices, including on July 30, 2020, where over 64% of volume was traded at artificially depressed prices.

208. Based on records maintained by Quantum, approximately 90 million shares were sold or issued for value by Quantum during the Relevant Period on US and Canadian markets. Many of these sales were at-the-market sales at secondary market prices artificially depressed by Defendants' manipulative spoofing.

209. The following table presents a list of Spoofing Episodes immediately prior (*i.e.*, within five minutes) to Quantum's sales or issuances for value of shares at artificially depressed prices:

Date	Shares Sold	Volume Weighted Average Sale Price	Sale Time	Time of Spoofing Episode	Defendant	Time Difference (seconds)	Ask Decline to Episode (bps)	Bid Decline to Episode (bps)	Mid Decline to Episode (bps)
7/22/20	100	3.9	11:57:12	11:57:12	John Doe 1	86	-152.96	-132.83	-142.86
7/22/20	100	3.79	11:56:41	11:56:41	John Doe 1	55	-152.96	-132.83	-142.86
7/24/20	100	3.76	10:45:05	10:45:05	RBC	270	-39.84	-59.52	-49.70
7/24/20	300	3.75	10:42:03	10:42:03	RBC	88	-39.84	-59.52	-49.70
7/24/20	100	3.775	10:41:39	10:41:39	RBC	64	-39.84	-59.52	-49.70
7/24/20	2	3.75	10:44:55	10:44:55	RBC	260	-39.84	-59.52	-49.70
7/24/20	5	3.75	10:42:54	10:42:54	RBC	139	-39.84	-59.52	-49.70
2/3/21	100,000	2.32595	15:27:07	15:27:07	John Doe 1	217	0.00	-94.04	-47.69
2/3/21	100,000	2.51831	15:23:26	15:23:26	John Doe 1	92	0.00	-124.61	-63.19
2/8/21	6,000	2.3005	10:24:25	10:24:25	John Doe 1	236	-67.11	-99.34	-83.33
2/10/21	180,793	3.62347	10:29:59	10:29:59	John Doe 1	273	-24.21	-71.26	-47.96
2/11/21	50,000	3.58406	9:41:23	9:41:23	John Doe 1	103	-116.28	-45.45	-80.46
2/11/21	150,000	3.46217	9:55:10	9:55:10	John Doe 1	168	-147.68	-61.22	-103.73
2/11/21	75,000	3.21813	10:08:03	10:08:03	John Doe 1	119	-49.75	-97.80	-73.98
2/17/21	3,000	2.72021	9:38:31	9:38:31	CIBC	181	0.00	-28.99	-14.60
3/2/21	25,300	2.13513	10:48:56	10:48:56	CIBC	284	0.00	-36.90	-18.59

210. Each of these sales by Quantum were conducted at prices that were artificially depressed by Defendants' manipulative trading. Put differently, Quantum suffered pecuniary harm in connection with each of the sales listed above because, absent Defendants' manipulative conduct, those sales would have occurred at higher prices.

211. The following table presents a list of dates and quantity of shares sold where Spoofing Episodes occurred within one hour before Quantum's sales or issuances for value of shares (as well as the relevant broker or brokers for the Spoofing Episode):

Date	Issuer Shares Sold within 1 Hour of Canadian Spoof	Broker
2020-07-22	800	John Doe
2020-07-24	1,003	RBC
2021-02-01	12,000	John Doe
2021-02-03	2,230,378	CIBC, RBC
2021-02-08	406,970	John Doe, RBC
2021-02-09	1,968,030	John Doe, RBC
2021-02-10	1,126,656	CIBC, John Doe
2021-02-11	1,750,775	John Doe
2021-02-16	6,000	CIBC

2021-02-17	278,837	CIBC
2021-02-19	15,000	CIBC
2021-02-23	15,300	CIBC
2021-02-24	6,300	CIBC
2021-03-01	187,733	CIBC
2021-03-02	161,853	CIBC
2021-03-19	304,281	CIBC
2021-03-22	217,202	CIBC
2021-03-24	133,521	CIBC

212. In sum, Quantum sold 8,822,639 shares within one hour after Defendants' spoofing episodes on Canadian exchanges, and 2,525,631 shares within one hour after Defendants' spoofing episodes on United States exchanges. These sales were made at artificially depressed prices.

213. While each Spoofing Episode had a small negative impact on the price of Quantum shares, the placement and cancellation of Baiting Orders throughout the Relevant Period had the cumulative effect of driving Quantum share price down during the Relevant Period. Defendants' wrongful conduct proximately caused the losses that Quantum suffered when it sold and/or issued for value shares at times during which the market price of Quantum shares was being driven downward.

2. Defendants Intentionally Hid Their Manipulative Spoofing Schemes

214. As described above, the manipulative process and spoofing requires that the true intent of the spoofer be hidden from the market. If other market participants knew that the Baiting Orders were not bona fide orders—but instead entered solely to induce other traders to move the price of the stock—those other traders would naturally ignore the Baiting Orders when making trading decisions.

215. Defendants intentionally hid their manipulative spoofing scheme in order to achieve their illegal and improper goal of depressing the price of Quantum shares, and their success in manipulating that price demonstrates that their spoofing activity was concealed from the market.

VI. CLAIMS FOR RELIEF

A. First Claim for Relief for Spoofing in Violation of Section 10(b) of the Exchange Act of 1934 and Rule 10b-5(a) and (c) Promulgated Thereunder

(Against All Defendants)

216. Quantum incorporates by reference paragraphs 1 to 215 as if more fully set forth herein.

217. During the Relevant Period, Defendants participated in a scheme that was intended to – and did – manipulate the market price of Quantum shares by placing Baiting Orders on US and Canadian exchanges, including CSE and Nasdaq. Defendants' Baiting Orders were used to further a market manipulation scheme that had a direct and immediate adverse impact on the market price of Quantum securities being traded on those exchanges.

218. Rules 10b-5(a) and (c) make it unlawful for any party to “(a) employ any device, scheme or artifice to defraud” and “(c) to engage in any act, practice, or course of business which operates or would operate as a fraud or deceit.”

219. Defendants are liable for (i) placing Baiting Orders on these exchanges that had no legitimate or economic purpose, were never intended to be executed, and were part of a spoofing scheme; and (ii) placing Executing Purchase Orders that completed the Spoofing Episode that operated as a scheme to manipulate the market price of Quantum securities.

220. As set forth more fully above, strong circumstantial evidence exists that Defendants' conduct reflects the intentional or reckless nature of their unlawful scheme and course of conduct to defraud the market in Quantum securities.

221. Quantum's securities were intended to be traded in an efficient market, in which all market participants had access to information that was relevant to the fair and orderly trading of a security. Defendants' scheme to manipulate was structured in a manner that concealed Defendants' unlawful intentions and made it extremely difficult for a reasonably diligent market participant—like Quantum—to discover the operative facts constituting the market manipulation scheme, much less the identities of the perpetrators of these schemes.

222. During the Relevant Period, despite Quantum's diligence, it did not discover—nor could a reasonably diligent plaintiff have discovered—the facts constituting the market manipulation claims or the identities of the perpetrators of these market manipulation schemes. Thus, when Quantum sold and/or issued for value shares of Quantum, the market prices of Quantum shares were not being determined by the natural forces of supply and demand but, rather, by the false and misleading pricing information injected into the market by the Defendants.

223. As set forth more fully above, Defendants' fraudulent trading activities had both a temporary and long-term adverse effect on the market price of Quantum shares.

224. During the Relevant Period, Quantum sold and/or issued for value approximately 90 million Quantum shares. As a direct and proximate result of Defendants' wrongful conduct, Quantum suffered damages in that it sold and/or issued for value Quantum shares at manipulated prices, in reliance on an assumption of an efficient market free of manipulation.

225. Each Defendant used the means or instrumentalities of interstate commerce, the facilities of a national securities exchange, and the mail, to trade Quantum's securities by placing, routing, filling, and executing these orders.

226. Defendants each knowingly employed devices, schemes, or artifices to defraud and engaged in acts, practices, and a course of conduct which operated as a fraud upon Quantum and the market in violation of Section 10(b) and Rule 10b-5 promulgated under the Exchange Act.

B. Second Claim for Relief for Spoofing in Violation of Section 9(a)(2) of The Securities Exchange Act of 1934

(Against All Defendants)

227. Quantum incorporates by reference paragraphs 1 to 226 as if more fully set forth herein.

228. Based upon the conduct described above, Defendants' manipulative schemes violated Section 9(a)(2) of the Securities Exchange Act of 1934, which makes it unlawful to engage in a series of manipulative transactions "in any security . . . creating actual or apparent active trading in such security, or raising or depressing the price of such security, for the purpose of inducing the purchase or sale of such security by others."

229. By reason of the conduct described above, Defendants directly used the mails, or instrumentalities of interstate commerce, or a facility of a national securities exchange, to: effect—alone or with one or more other person—a series of transactions in Quantum shares that created actual or apparent trading in such securities or raising or depressing the price of such securities for the purpose of inducing the purchase or sale of such securities by others; and engage in the market manipulation strategy of spoofing which artificially affected the prices of Quantum shares that Quantum sold and/or issued for value.

230. Defendants' conscious misbehavior or recklessness artificially affected the price of Quantum shares that Quantum sold and/or issued for value during the Relevant Period. Defendants' conscious misbehavior or recklessness thus caused injury to Quantum.

C. Third Claim for Relief for New York Common Law Fraud

(Against All Defendants)

231. Quantum incorporates by reference paragraphs 1 to 230 as if more fully set forth herein.

232. By placing and then cancelling Baiting Orders in their abusive spoofing scheme, Defendants each knowingly or recklessly injected into the market false and misleading information concerning the supply of Quantum shares that appeared available for trading. This interfered with the natural market forces of supply and demand and artificially drove the price of the shares downward. When Quantum sold its stock during the Relevant Period, it suffered damages that were directly and proximately caused by Defendants' fraud.

233. When Quantum sold its shares during the Relevant Period, it did not possess any specific facts demonstrating that the market price of Quantum's share was being manipulated and therefore, it relied on the efficiency of the market that had been unlawfully manipulated.

VII. PRAAYER FOR RELIEF

WHEREFORE, Quantum respectfully requests that this Court enter a judgment:

A. Finding that Defendants violated the federal securities laws as alleged in this Complaint;

B. Ordering Defendants to pay damages as a result of their unlawful conduct in an amount to be determined at trial;

C. Enjoining Defendants from engaging in any further manipulation of the share price of Quantum, whether on their own behalf or on their customers' behalf;

D. Awarding reasonable attorney's fees and costs together with all available pre- and post-judgment interest; and

E. Granting such other and further relief as the Court deems just and appropriate.

VIII. DEMAND FOR JURY TRIAL

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, Quantum demands trial by jury in this action of all issues so triable.

Dated: May 1, 2025
New York, New York

Respectfully submitted,

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